



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8**

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Ref: ENF-L

October 7, 2009

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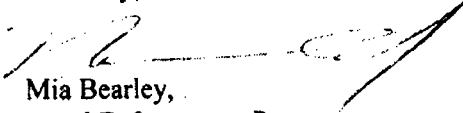
United Park City Mines
Kerry C. Gee, Vice President
United Park City Mines Company
P. O. Box 1450
Park City, Utah 84060

Re: Lower Silver Creek, Operable Unit #2
Richardson Flat Tailings Superfund Site, Park City, Utah
Final Administrative Order on Consent

Dear Kevin and Kerry:

Please find enclosed the above-referenced final and entered Site Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study (RI/FS). Thank you for all of your help throughout the process of reaching this agreement. The team has enjoyed working together with you both during these settlement negotiations. If you have any questions, please do contact me at (303) 312-6554. Thanks again.

Sincerely,


Mia Bearley,
Legal Enforcement Program

Enclosures

Letter only, scanned and emailed to:
M. O'Reilly, ENF-RC
K. Hernandez, EPR-SR

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IN THE MATTER OF:

ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY

U.S. EPA Region VIII
CERCLA Docket No. **CERCLA-08-2009-0007**

Proceeding Under Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §§ 9604, 9607 and 9622.

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ADMINISTRATIVE SETTLEMENT AGREEMENT AND ORDER ON CONSENT
FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY

Lower Silver Creek, Richardson Flat Site, Operable Unit No. 2

I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Settlement Agreement and Order on Consent ("Settlement Agreement") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and United Park City Mines Company, ("Respondent"). The Settlement Agreement concerns the preparation and performance of a remedial investigation and feasibility study ("RI/FS") for the Lower Silver Creek Site, Operable Unit 2 of the Richardson Flat Tailings Site, located near Park City, Utah ("Site") and the reimbursement for interim and future response costs incurred by EPA in connection with the RI/FS.

2. This Settlement Agreement is issued under the authority vested in the President of the United States by Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §§ 9604, 9607 and 9622 ("CERCLA"). This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2926 (Jan. 29, 1987), and further delegated to Regional Administrators on May 11, 1994, by EPA Delegation Nos. 14-14-C and 14-14-D. This authority was further redelegated by the Regional Administrator of EPA Region 8 to the Assistant Regional Administrator, Office of Ecosystem Protection and Remediation by EPA Delegation No. 14-14-C.

3. In accordance with Sections 104(b)(2) and 122(j)(1) of CERCLA, 42 U.S.C. §§ 9604(b)(2) and 9622(j)(1), EPA notified the United States Department of the Interior and the Utah Department of Environmental Quality on November 19, 1999, of negotiations with potentially responsible parties regarding the release of hazardous substances that may have resulted in injury to the natural resources under Federal and State trusteeship. Subsequent notice regarding Operable Unit 2 of the Richardson Flat Tailings Site was given to these parties on June 24, 2009.

4. EPA and Respondent recognize that this Settlement Agreement has been negotiated in good faith and that the actions undertaken by Respondent in accordance with this Settlement Agreement do not constitute an admission of any liability. Respondent does not admit, and retains the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement Agreement, the validity of the findings of fact, conclusions of law and determinations in Sections V and VI of this Settlement Agreement. Respondent agrees to comply with and be bound by the terms of this Settlement Agreement and further agrees that it will not contest the basis or validity of this Settlement Agreement or its terms.

II. PARTIES BOUND

5. This Settlement Agreement applies to and is binding upon EPA and upon Respondent and its successors and assigns. Any change in ownership or corporate status of Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter such Respondent's responsibilities under this Settlement Agreement.

6. Respondent shall ensure that its contractors, subcontractors, and representatives engaged in the Work as defined herein receive a copy of this Settlement Agreement and comply with this Settlement Agreement. Respondent shall be responsible for any noncompliance with this Settlement Agreement.

7. The undersigned representative of Respondent certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement Agreement and to execute and legally bind Respondent to this Settlement Agreement.

III. STATEMENT OF PURPOSE

8. In entering into this Settlement Agreement, the objectives of EPA and Respondent are: (a) to determine the nature and extent of contamination and any threat to the public health, welfare, or the environment caused by the release or threatened release of hazardous substances, pollutants or contaminants at or from the Site, by conducting a Remedial Investigation as more specifically set forth in the Remedial Investigation/Feasibility Study Work Plan ("RI/FS Work Plan") attached as Appendix A to this Settlement Agreement; (b) to identify and evaluate remedial alternatives to prevent, mitigate or otherwise respond to or remedy any release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site, by conducting a Feasibility Study as more specifically set forth in the RI/FS Work Plan in Appendix A to this Settlement Agreement; and (c) to recover response and oversight costs incurred by EPA with respect to this Settlement Agreement.

9. The Work conducted under this Settlement Agreement is subject to approval by EPA and shall provide all appropriate and necessary information to assess Site conditions and evaluate alternatives to the extent necessary to select a remedy that will be consistent with CERCLA and the National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Part 300 ("NCP"). Respondent shall conduct all Work under this Settlement Agreement in compliance with CERCLA, the NCP, and all applicable EPA guidance, policies, and procedures.

IV. DEFINITIONS

10. Unless otherwise expressly provided herein, terms used in this Settlement Agreement that are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever

terms listed below are used in this Settlement Agreement or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

a. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601, *et seq.*

b. "Day" shall mean a calendar day. In computing any period of time under this Settlement Agreement, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next working day.

c. "Effective Date" shall be the effective date of this Settlement Agreement as provided in Section XXIX.

d. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

e. "Engineering Controls" shall mean constructed containment barriers or systems that control one or more of the following: downward migration, infiltration or seepage of surface runoff or rain, or natural leaching migration of contaminants through the subsurface over time. Examples include caps, engineered bottom barriers, immobilization processes, and vertical barriers.

f. "Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing plans, reports and other items pursuant to this Settlement Agreement, verifying the Work, or otherwise implementing, overseeing, or enforcing this Settlement Agreement, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, Agency for Toxic Substances and Disease Registry ("ATSDR") costs, the costs incurred pursuant to Paragraph 50 (Access) and Paragraph 37 (Emergency Response), and Paragraph 79 (Work Takeover). Future Response Costs shall also include all Interim Response Costs.

g. "Institutional controls" shall mean non-engineered instruments, such as administrative and/or legal controls, that help to minimize the potential for human exposure to contamination and/or protect the integrity of a remedy by limiting land and/or resource use. Examples of institutional controls include easements and covenants, zoning restrictions, special building permit requirements, and well drilling prohibitions.

h. "Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.

i. "Interim Response Costs" shall mean all costs, including direct and indirect costs, paid by the United States in connection with the Site between August 27, 2009 and the Effective Date.

j. "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

k. "Paragraph" shall mean a portion of this Settlement Agreement identified by an Arabic numeral.

l. "Parties" shall mean EPA and Respondent.

m. "RCRA" shall mean the Resource Conservation and Recovery Act, also known as the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901, *et seq.*

n. "Remedial Investigation/Feasibility Study Work Plan" or "RI/FS Work Plan" shall mean the Work Plan for development of a RI/FS for the Site, as set forth in Appendix A to this Settlement Agreement. The RI/FS Work Plan is incorporated into this Settlement Agreement and is an enforceable part of this Settlement Agreement, as are any modifications made thereto in accordance with this Settlement Agreement.

o. "Respondent" shall mean United Park City Mines Company.

p. "Section" shall mean a portion of this Settlement Agreement identified by a Roman numeral.

q. "Settlement Agreement" shall mean this Administrative Settlement Agreement and Order on Consent, the RI/FS Work Plan, all appendices attached hereto (listed in Section XXVII) and all documents incorporated by reference into this document. In the event of conflict between this Settlement Agreement and any appendix or other incorporated documents, this Settlement Agreement shall control.

r. "Site" shall mean the Lower Silver Creek Site, Operable Unit 2 of the Richardson Flats Tailings Superfund Site, encompassing approximately 1,875 acres near Park City, Summit County, Utah, and depicted generally on the map attached as Appendix B. Lower Silver Creek is situated north and east of Highway 40, bounded by Highway 40 on its southern end and Interstate 80 to the north. It is located in Township 1 South Range 4 East, in Sections 10, 11, 15, 14, 22, 23, 27, 26, and 35, with approximately 500 feet occurring in Section 2 of Township 2 South Range 4 East. The Site ranges in width from 2,100 feet at the southern boundary to 3,800 feet near Pivotal Promontory Road. The Site is located in Summit County, Utah.

s. "State" shall mean the State of Utah.

t. "Waste Material" shall mean (1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27).

u. "Work" shall mean all activities Respondent is required to perform under this Settlement Agreement, except those required by Section XIV. (Retention of Records).

V. FINDINGS OF FACT

11. The Lower Silver Creek Site ("Site"), which is Operable Unit 2 of the Richardson Flat Tailings Site, is located two miles east of Park City, in Summit County, Utah. The Site is part of the Silver Creek Watershed. Mining operations within the Park City Mining District reportedly produced approximately 16 million tons of ore between 1875 and 1967. Over the course of time, these mining operations resulted in fluvial transport of tailings and mining waste downstream to the Site. The Site extends over 4.5 miles along the banks of Silver Creek from U.S. Highway 40 on the southern end of the Site downstream to Interstate 80 on the northern end of the Site.

12. Soil samples have indicated high concentrations of lead (26,200 mg/kg), arsenic (745 mg/kg), zinc (18,700 mg/kg) and cadmium (119 mg/kg) in certain soils within the Site. Surface water sampling has identified elevated levels of cadmium (47.5 ug/l), lead (40 ug/l) and zinc (9,310 ug/l) in certain stretches of Silver Creek. EPA estimates that there are 1,479,000 cubic yards of mining waste, extending over 400 acres along the flood plain of the Silver Creek, including wetlands. The primary land use on the Site is commercial livestock grazing, however, the Site also hosts recreational use. A former rail line has been converted into a recreational trail and is now used extensively for hiking, biking, observing wildlife, and accessing Silver Creek for fishing. In addition, the Summit County Fire House is located within the Site and is regularly occupied. The area surrounding the Site is being developed with commercial businesses to the west and a residential community to the east. The Echo Reservoir, a source of drinking water, is located 12.5 miles downstream of the Site.

13. Respondent conducted various mining related operations within the Park City Mining District beginning in 1953, continuing until approximately the late-1980s. These activities included mining of ore from the Ontario and Daly West mines, owned by Respondent. Mining waste from these operations was carried down-stream and impacted the Site, however Respondent does not agree with this conclusion. The Grasselli, Beggs, ASARCO, the Big Four, Pacific Bridge and other mills processed materials upstream and within the boundary of the Site. Respondent neither owned property nor conducted operations within the Site, as defined herein.

14. Approximately seven million tons of tailings are located at Operable Unit 1 of the Richardson Flat Tailings Site ("OU1"), which is directly upgradient and contiguous to the Site, OU2. Respondent conducted mining related operations on OU1.

Respondent continues to own, and is in the process of implementing remedial actions at OUI.

15. Observed contaminant release has been documented through chemical analysis. Hazardous substances attributable to the Site were detected at concentrations greater than three times the upstream and benchmark concentrations.

16. The entire portion of the Lower Silver Creek that flows through the Site (approximately 4.5 miles of stream reach) is bordered by wetlands. The surface water samples indicate that cadmium, lead, and zinc concentrations exceed water quality standards for protection of aquatic life. A drinking water supply intake is located within 12.5 miles of the Site. Exposed tailings material in the northern portion of the Site presents the potential pathway of airborne migration of contaminants such as lead and arsenic. Further, potential Site pathways exist in the form of dermal exposure and ingestion due to risks associated with potential contact with these materials and these exposed tailings. These potential exposure pathways for lead, arsenic, and cadmium may impact human health and the environment.

17. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems and the cardiovascular system. Lead is persistent in the environment and accumulates in soils and sediments. Ecosystems near sources of lead demonstrate a wide range of adverse effects including loss of biodiversity, changes in community composition, decreased growth and reproductive rates in plants and animals, and neurological effects in vertebrates. Cadmium and its compounds are extremely toxic even in low concentrations, and will bioaccumulate in organisms and ecosystems.

18. The Site, Operable Unit 2 of the Richardson Flat Tailings Site, is not proposed for listing on the National Priorities List ("NPL"). Operable Unit 1 of the Richardson Flat Tailings Site, which is directly upgradient and contiguous to the Site, was originally proposed for inclusion on the NPL on June 24, 1988. Due to scoring issues and comments received from Respondent and others during the public comment period, Operable Unit 1 was removed from NPL consideration in February 1991. Operable Unit 1 was re-proposed for the NPL on February 7, 1992, however, no action has been taken with regard to this proposed listing.

19. Respondent, United Park City Mines Company, is a corporation doing business in the State of Utah and incorporated in the State of Delaware on May 8, 1953. Respondent is one of several responsible parties at the Site.

VI. CONCLUSIONS OF LAW AND DETERMINATIONS

Based on the Findings of Fact set forth above, EPA has determined that:

20. The Lower Silver Creek Site, Operable Unit 2 of the Richardson Flat Tailings Site, is a "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

21. The contamination found at the Site, as identified in the Findings of Fact above, includes "hazardous substances" as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

22. The conditions described in the Findings of Fact above constitute an actual and/or threatened "release" of a hazardous substance from the facility as defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

23. Respondent is a "person" as defined in Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

24. Respondent is a responsible party under Section 107 of CERCLA, 42 U.S.C. § 9607.

a. Respondent is a person whose operations produced hazardous substances found at the Site. Respondent therefore may be liable under Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2).

25. The actions required by this Settlement Agreement are necessary to protect the public health, welfare or the environment, are in the public interest, 42 U.S.C. § 9622(a), are consistent with CERCLA and the NCP, 42 U.S.C. §§ 9604(a)(1), 9622(a), and will expedite effective remedial action and minimize litigation, 42 U.S.C. § 9622(a).

26. EPA has determined that Respondent is qualified to conduct the RI/FS within the meaning of Section 104(a) of CERCLA, 42 U.S.C. § 9604(a), and will carry out the Work properly and promptly, in accordance with Sections 104(a) and 122(a) of CERCLA, 42 U.S.C. §§ 9604(a) and 9622(a), if Respondent complies with the terms of this Settlement Agreement.

VII. SETTLEMENT AGREEMENT AND ORDER

27. Based upon the foregoing Findings of Fact and Conclusions of Law and Determinations, it is hereby Ordered and Agreed that Respondent shall comply with all provisions of this Settlement Agreement, including, but not limited to, all appendices to this Settlement Agreement and all documents incorporated by reference into this Settlement Agreement.

VIII. DESIGNATION OF CONTRACTORS AND PROJECT COORDINATORS

28. Selection of Contractors, Personnel. All Work performed under this Settlement Agreement shall be under the direction and supervision of qualified personnel. Respondent has notified EPA that it intends to use the following personnel in carrying out such work: United Park City Mines personnel under the direction of Kerry C. Gee, and Resource Management Consultants, Inc., under the direction of James Fricke. EPA hereby approves Respondent's selection of the foregoing contractors and personnel.

During the course of the RI/FS, Respondent shall notify EPA in writing of any changes or additions in the contractors or personnel used to carry out such Work, providing names, titles, and qualifications. EPA shall have the right to disapprove changes and additions to contractors or personnel in its discretion. If EPA disapproves in writing of any person's or contractors' technical qualifications, Respondent shall notify EPA of the identity and qualifications of the replacements within 30 days of the written notice. If EPA disapproves of designated Contractors or personnel, Respondent shall retain different Contractors or personnel and shall notify EPA of the name(s), address(es), telephone number(s) and qualifications within 15 days following EPA's disapproval.

29. Respondent has designated Kerry C. Gee as its Project Coordinator who shall be responsible for administration of all actions by Respondent required by this Settlement Agreement. EPA hereby approves Respondent's selection of the foregoing Project Coordinator. To the greatest extent possible, the Project Coordinator shall be present on Site or readily available during Site Work. Respondent shall have the right to change its Project Coordinator, subject to EPA's right to disapprove. Respondent shall notify EPA 30 days before such a change is made. The initial notification may be made orally, but shall be promptly followed by a written notification. If EPA disapproves of the designated Project Coordinator, Respondent shall retain a different Project Coordinator and shall notify EPA of that person's name, address, telephone number and qualifications within 15 days following EPA's disapproval. EPA shall direct all submissions required by this Settlement Agreement to the Project Coordinator at:

Kerry C. Gee
Vice President
United Park City Mines Co.
P.O. Box 1450
Park City Utah 84060
Office: 435-333-6601
Cell: 801-694-0382

30. EPA has designated Kathryn Hernandez of EPA's Ecosystems Protection and Remediation Office, Region 8, as its Project Coordinator. EPA will notify Respondent of a change of its designated Project Coordinator. Except as otherwise provided in this Settlement Agreement, Respondent shall direct all submissions required by this Settlement Agreement to the Project Coordinator at:

Kathryn Hernandez
Remedial Project Manager
Superfund Remedial Section, 8EPR-RA
US EPA, Region VIII,
1595 Wynkoop Street
Denver, Colorado 80202

31. EPA's Project Coordinator shall have the authority lawfully vested in a Remedial Project Manager ("RPM") and On-Scene Coordinator ("OSC") by the NCP. In

addition, EPA's Project Coordinator shall have the authority consistent with the NCP, to halt any Work required by this Settlement Agreement, and to take any necessary response action when s/he determines that conditions at the Site may present an immediate endangerment to public health or welfare or the environment. The absence of the EPA Project Coordinator from the area under study pursuant to this Settlement Agreement shall not be cause for the stoppage or delay of Work.

32. EPA shall arrange for a qualified person to assist in its oversight and review of the conduct of the RI/FS, as required by Section 104(a) of CERCLA, 42 U.S.C. Section 9604(a). Such person shall have the authority to observe Work and make inquiries in the absence of EPA, but not to modify the RI/FS Work Plan.

IX. WORK TO BE PERFORMED

33. RI/FS Work Plan. Respondent shall conduct activities and submit plans, reports, or other deliverables as provided by the attached RI/FS Work Plan, which is incorporated by reference and hereby approved by EPA. All such Work shall be conducted in accordance with the provisions of this Settlement Agreement, the RI/FS Work Plan, CERCLA, the NCP and EPA guidance, including, but not limited to, the "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" (OSWER Directive # 9355.3-01, October 1988 or subsequently issued guidance), and the "Guidance for Data Usability in Risk Assessment" (OSWER Directive #9285.7-05, October 1990 or subsequently issued guidance). EPA may amend or modify the RI/FS Work Plan after discussion with Respondent, consistent with paragraph 34 (a-e), for the purpose of reaching mutual agreement. Any plans, reports and other deliverables required by the RI/FS Work Plan will be reviewed and approved by EPA pursuant to Section X (EPA Approval of Plans and Other Submissions). Upon EPA's request, Respondent shall also provide copies of plans, reports or other deliverables to Community Advisory Groups, Technical Assistance Grant recipients or any other entities as directed by EPA. Upon request by EPA, Respondent shall submit in electronic form all portions of any plan, report or other deliverable Respondent is required to submit pursuant to provisions of this Settlement Agreement.

34. Modification of the RI/FS Work Plan.

a. In the event of unanticipated or changed circumstances at the Site, Respondent shall notify the EPA Project Coordinator by telephone within 24 hours of discovery of the unanticipated or changed circumstances.

b. EPA may, after discussion with Respondent, determine that in addition to tasks defined in the initially approved RI/FS Work Plan, other additional Work, consistent with paragraph 8 (Statement of Purpose), may be necessary to accomplish the objectives of the RI/FS. Respondent agrees to perform these response actions in addition to those required by the initially approved RI/FS Work Plan, including any approved modifications, if EPA determines that such actions are necessary for a complete RI/FS.

c. Respondent shall confirm its willingness to perform the additional Work in writing to EPA within 7 days of receipt of the EPA request. If Respondent objects to any modification determined by EPA to be necessary pursuant to this Paragraph, Respondent may seek dispute resolution pursuant to Section XV (Dispute Resolution). The RI/FS Work Plan shall be modified in accordance with the final resolution of the dispute.

d. Respondent shall complete the additional Work according to the standards, specifications, and schedule set forth or approved by EPA in a written modification to the RI/FS Work Plan or written RI/FS Work Plan supplement. EPA reserves the right to conduct the Work itself at any point, to seek reimbursement from Respondent, and/or to seek any other appropriate relief.

e. Nothing in this Paragraph shall be construed to limit EPA's authority to require performance of further response actions at the Site.

35. Meetings. Respondent shall make presentations at, and participate in, meetings at the request of EPA during the initiation, conduct, and completion of the RI/FS. In addition to discussion of the technical aspects of the RI/FS, topics will include anticipated problems or new issues. Meetings will be scheduled at EPA's discretion.

36. Progress Reports. Respondent shall provide to EPA quarterly progress reports by the 15th day of the following month. At a minimum, with respect to the preceding month, these progress reports shall (1) describe the actions which have been taken to comply with this Settlement Agreement during that month, (2) include all results of sampling and tests and all other data received by Respondent, (3) describe Work planned for the next two months with schedules relating such Work to the overall project schedule for RI/FS completion, and (4) describe all problems encountered and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays.

37. Emergency Response and Notification of Releases.

a. In the event of any action or occurrence resulting from performance of the Work which causes or threatens a release of Waste Material from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Respondent shall immediately take all appropriate action. Respondent shall take these actions in accordance with all applicable provisions of this Settlement Agreement, including, but not limited to, the Health and Safety Plan, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondent shall also immediately notify the EPA Project Coordinator or, in the event of his/her unavailability, an On Scene Coordinator ("OSC") or Curtis Kimbel, Emergency Response Unit, EPA Region 8 Preparedness, Assessment and Emergency Response Program, at 303-312-6108, and the Region 8 Emergency Response Spill Report Hotline, at 1-800-227-8914 of the incident or Site conditions. In the event that Respondent fails to take appropriate response action as required by this Paragraph, and

EPA takes such action instead, Respondent shall reimburse EPA all costs of the response action not inconsistent with the NCP pursuant to Section XVIII (Payment of Response Costs).

b. In addition, in the event that Respondent becomes aware of any release of a hazardous substance from the Site, Respondent shall immediately notify the EPA Project Coordinator, an OSC or the Regional Duty Officer at Region 8 Emergency Response Spill Report Hotline, at 1-800-227-8914 and the National Response Center at (800) 424-8802. Respondent shall submit a written report to EPA within 7 days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004, *et seq.*

X. EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS

38. After review of any plan, report or other item that is required to be submitted for approval pursuant to this Settlement Agreement, in a notice to Respondent EPA shall: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that Respondent modify the submission; or (e) any combination of the above. Any disapproval or modification shall be consistent with the purposes set forth in paragraph 8. However, EPA shall not modify a submission without first providing Respondent at least one notice of deficiency and an opportunity to cure within 30 days, except where to do so would cause serious disruption to the Work or where previous submission(s) have been disapproved due to material defects.

39. In the event of approval, approval upon conditions, or modification by EPA, pursuant to Subparagraph 38 (a), (b), (c) or (e), Respondent shall proceed to take any action required by the plan, report or other deliverable, as approved or modified by EPA subject only to its right to invoke the Dispute Resolution procedures set forth in Section XV (Dispute Resolution) with respect to the modifications or conditions made by EPA. Following EPA approval or modification of a submission or portion thereof, Respondent shall not thereafter alter or amend such submission or portion thereof unless directed by EPA. In the event that EPA modifies the submission to cure the deficiencies pursuant to Subparagraph 38(c) and the submission had a material defect, EPA retains the right to seek stipulated penalties, as provided in Section XVI (Stipulated Penalties).

40. Resubmission.

a. Upon receipt of a notice of disapproval, Respondent shall, within 15 days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the plan, report, or other deliverable for approval. Any stipulated penalties applicable to the submission, as provided in Section XVI, shall accrue during the 15-day

period or otherwise specified period but shall not be payable unless the resubmission is disapproved or modified due to a material defect as provided in Paragraphs 41 and 42.

b. Notwithstanding the receipt of a notice of disapproval, Respondent shall proceed to take any action required by any non-deficient portion of the submission, unless otherwise directed by EPA. Implementation of any non-deficient portion of a submission shall not relieve Respondent of any liability for stipulated penalties under Section XVI (Stipulated Penalties).

c. Respondent shall not proceed further with any subsequent activities or tasks until receiving EPA approval, approval on condition or modification of the following deliverables: RI/FS Work Plan and Sampling and Analysis Plan, Draft Remedial Investigation Report and Treatability Testing Work Plan and Sampling and Analysis Plan and Draft Feasibility Study Report. While awaiting EPA approval, approval on condition or modification of these deliverables, Respondent shall proceed with all other tasks and activities which may be conducted independently of these deliverables, in accordance with the schedule set forth under this Settlement Agreement.

d. For all remaining deliverables not listed above in subparagraph 40(c), Respondent shall proceed with all subsequent tasks, activities and deliverables without awaiting EPA approval on the submitted deliverable. EPA reserves the right to stop Respondent from proceeding further, either temporarily or permanently, on any task, activity or deliverable at any point during the RI/FS.

41. If EPA disapproves a resubmitted plan, report or other deliverable, or portion thereof, EPA may again direct Respondent to correct the deficiencies. EPA shall also retain the right to modify or develop the plan, report or other deliverable. Respondent shall implement any such plan, report, or deliverable as corrected, modified or developed by EPA, subject only to Respondent's right to invoke the procedures set forth in Section XV (Dispute Resolution).

42. If upon resubmission, a plan, report, or other deliverable is disapproved or modified by EPA due to a material defect, Respondent shall be deemed to have failed to submit such plan, report, or other deliverable timely and adequately unless Respondent invokes the dispute resolution procedures in accordance with Section XV (Dispute Resolution) and EPA's action is revoked or substantially modified pursuant to a Dispute Resolution decision issued by EPA or superseded by an agreement reached pursuant to that Section. The provisions of Section XV (Dispute Resolution) and Section XVI (Stipulated Penalties) shall govern the implementation of the Work and accrual and payment of any stipulated penalties during Dispute Resolution. If EPA's disapproval or modification is not otherwise revoked, substantially modified or superseded as a result of a decision or agreement reached pursuant to the Dispute Resolution process set forth in Section XV, stipulated penalties shall accrue for such violation from the date on which the initial submission was originally required, as provided in Section XVI.

43. In the event that EPA takes over some of the tasks, but not the preparation of the RI Report or the FS Report, Respondent shall incorporate and integrate information supplied by EPA into the final reports. In conducting the Work Respondent may rely on and incorporate data (including human health risk and ecological risk assessments) previously collected by EPA, as provided in the RI/FS Work Plan, however, all such data shall conform to quality assurance requirements as set forth in the RI/FS Work Plan, the QAPP and guidances identified therein.

44. All plans, reports, and other RI/FS Work Plan deliverables submitted to EPA under this Settlement Agreement shall, upon approval or modification by EPA, be incorporated into and enforceable under this Settlement Agreement. In the event EPA approves or modifies a portion of a plan, report, or other deliverable submitted to EPA under this Settlement Agreement, the approved or modified portion shall be incorporated into and enforceable under this Settlement Agreement.

45. Neither failure of EPA to expressly approve or disapprove of Respondent's submissions within a specified time period, nor the absence of comments, shall be construed as approval by EPA. Whether or not EPA gives express approval for Respondent's deliverables, Respondent is responsible for preparing deliverables acceptable to EPA.

XI. QUALITY ASSURANCE, SAMPLING, AND ACCESS TO INFORMATION

46. Quality Assurance. Respondent shall assure that Work performed, samples taken and analyses conducted conform to the requirements of the RI/FS Work Plan, the QAPP and guidances identified therein. Respondent will assure that field personnel used by Respondent are properly trained in the use of field equipment and in chain of custody procedures. Respondent shall only use laboratories which have a documented quality system that complies with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, March 2001) or equivalent documentation as determined by EPA.

47. Sampling.

a. All results of sampling, tests, modeling or other data (including raw data) generated by Respondent, or on Respondent's behalf, during the period that this Settlement Agreement is effective, shall be submitted to EPA in the next quarterly progress report as described in Paragraph 36 of this Settlement Agreement. EPA will make available to Respondent validated data generated by EPA unless it is exempt from disclosure by any federal or state law or regulation.

b. Respondent shall verbally notify EPA at least 30 days prior to conducting significant field events as described in the RI/FS Work Plan. At EPA's verbal or written request, or the request of EPA's oversight assistant, Respondent shall allow split or duplicate samples to be taken by EPA (and its authorized representatives) of any samples collected in implementing this Settlement Agreement. All split samples of Respondent shall be analyzed by the methods identified in the QAPP.

48. Access to Information.

a. Respondent shall provide to EPA, upon request, copies of all documents and information within its possession or control or that of its contractors or agents relating to activities at the Site or to the implementation of this Settlement Agreement, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Respondent shall also make available to EPA, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

b. Respondent may assert business confidentiality claims covering part or all of the documents or information submitted to EPA under this Settlement Agreement to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when it is submitted to EPA, or if EPA has notified Respondent that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such documents or information without further notice to Respondent. Respondent shall segregate and clearly identify all documents or information submitted under this Settlement Agreement for which Respondent asserts business confidentiality claims.

c. Respondent may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondent asserts such a privilege in lieu of providing documents, it shall provide EPA with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the contents of the document, record, or information; and 6) the privilege asserted by Respondent. However, no documents, reports or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged.

d. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information evidencing conditions at or around the Site.

49. In entering into this Settlement Agreement, Respondent waives any objections to any data gathered, generated, or evaluated by EPA, the State or Respondent in the performance or oversight of the Work that has been verified according to the quality assurance/quality control ("QA/QC") procedures required by the Settlement

Agreement or any EPA-approved RI/FS Work Plans or Sampling and Analysis Plans. If Respondent objects to any other data relating to the RI/FS, Respondent shall submit to EPA a report that specifically identifies and explains its objections, describes the acceptable uses of the data, if any, and identifies any limitations to the use of the data. The report must be submitted to EPA within 15 days of the monthly progress report containing the data.

XII. SITE ACCESS

50. Where any action under this Settlement Agreement is to be performed in areas owned by or in possession of someone other than Respondent, Respondent shall use its best efforts to obtain all necessary access agreements within 30 days after the Effective Date, or as otherwise specified in writing by the EPA Project Coordinator. Solely for, and limited to, the purpose of conducting the Work required by this Settlement Agreement, Respondent is designated as an authorized representative under EPA's access agreements. If additional access agreements become necessary, Respondent shall immediately notify EPA if after using its best efforts it is unable to obtain such agreements. Respondent shall describe in writing its efforts to obtain access. If Respondent cannot obtain access agreements, EPA may either (i) obtain access for Respondent or assist Respondent in gaining access, to the extent necessary to effectuate the response actions described herein, using such means as EPA deems appropriate; (ii) perform those tasks or activities with EPA contractors; or (iii) terminate the Settlement Agreement. Respondent shall reimburse EPA for all costs and attorney's fees incurred by the United States in obtaining such access, in accordance with the procedures in Section XVIII (Payment of Response Costs). If EPA performs those tasks or activities with EPA contractors and does not terminate the Settlement Agreement, Respondent shall perform all other tasks or activities not requiring access to that property, and shall reimburse EPA for all costs incurred in performing such tasks or activities. Respondent shall integrate the results of any such tasks or activities undertaken by EPA into its plans, reports and other deliverables.

51. Notwithstanding any provision of this Settlement Agreement, EPA retains all of its access authorities and rights, as well as all of its rights to require land/water use restrictions, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

XIII. COMPLIANCE WITH OTHER LAWS

52. Respondent shall comply with all applicable local, state and federal laws and regulations when performing the RI/FS. No local, state, or federal permit shall be required for any portion of any action conducted entirely on-site, including studies, if the action is selected and carried out in compliance with Section 121 of CERCLA, 42 U.S.C. § 9621. Where any portion of the Work is to be conducted off-site and requires a federal or state permit or approval, Respondent shall submit timely and complete applications and take all other actions necessary to obtain and to comply with all such permits or

approvals. This Settlement Agreement is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

XIV. RETENTION OF RECORDS

53. During the pendency of this Settlement Agreement and for a minimum of 10 years after commencement of construction of any remedial action, Respondent shall preserve and retain all non-identical copies of documents, records, and other information (including documents, records, or other information in electronic form) now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work or the liability of any person under CERCLA with respect to the Site, regardless of any corporate retention policy to the contrary. Until 10 years after commencement of construction of any remedial action, Respondent shall also instruct its contractors and agents to preserve all documents, records, and other information of whatever kind, nature or description relating to performance of the Work.

54. At the conclusion of this document retention period, Respondent shall notify EPA at least 90 days prior to the destruction of any such documents, records or other information, and, upon request by EPA, Respondent shall deliver any such documents, records, or other information to EPA. Respondent may assert that certain documents, records, and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondent asserts such a privilege, it shall provide EPA with the following: 1) the title of the document, record, or other information; 2) the date of the document, record, or other information; 3) the name and title of the author of the document, record, or other information; 4) the name and title of each addressee and recipient; 5) a description of the subject of the document, record, or other information; and 6) the privilege asserted by Respondent. However, no documents, records or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged.

55. Respondent hereby certifies that to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information (other than identical copies) relating to its potential liability regarding the Site since notification of potential liability by EPA or the filing of suit against it regarding the Site and that it has fully complied with any and all EPA requests for information pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927.

XV. DISPUTE RESOLUTION

56. Unless otherwise expressly provided for in this Settlement Agreement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Settlement Agreement. The Parties shall attempt to resolve any disagreements concerning this Settlement Agreement expeditiously and informally.

57. If Respondent objects to any EPA action taken pursuant to this Settlement Agreement, including billings for Future Response Costs, it shall notify EPA in writing of its objection(s) within 30 days of such action, unless the objection(s) has/have been resolved informally. EPA and Respondent shall have 30 days from EPA's receipt of Respondent's written objection(s) to resolve the dispute (the "Negotiation Period"). The Negotiation Period may be extended at the sole discretion of EPA. Such extension may be granted verbally but must be confirmed in writing.

58. Any agreement reached by the Parties pursuant to this Section shall be in writing and shall, upon signature by the Parties, be incorporated into and become an enforceable part of this Settlement Agreement. If the Parties are unable to reach an agreement within the Negotiation Period, an EPA management official at the Assistant Regional Administrator ("ARA") level or higher will issue a written decision. EPA's decision shall be incorporated into and become an enforceable part of this Settlement Agreement. Respondent's obligations under this Settlement Agreement shall not be tolled by submission of any objection for dispute resolution under this Section. Following resolution of the dispute, as provided by this Section, Respondent shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs, and regardless of whether Respondent agrees with the decision.

XVI. STIPULATED PENALTIES

59. Respondent shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 60 and 61 for failure to comply with any of the requirements of this Settlement Agreement specified below unless excused under Section XVII (Force Majeure). "Compliance" by Respondent shall include completion of the Work under this Settlement Agreement or any activities contemplated under any RI/FS Work Plan or other plan approved under this Settlement Agreement identified below, in accordance with all applicable requirements of law, this Settlement Agreement, the RI/FS Work Plan, and any plans or other documents approved by EPA pursuant to this Settlement Agreement and within the specified time schedules established by and approved under this Settlement Agreement.

60. Stipulated Penalty Amounts.

a. The following stipulated penalties shall accrue per day for failure to submit a timely or adequate Remedial Investigation Report or a timely or adequate Feasibility Study Report:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$ 250	1 st through 14 th day
\$ 1,000	15 th through 30 th day

\$ 37,500

31st day and beyond

b. The following stipulated penalties shall accrue per day for failure to timely establish any required escrow account and failure to submit timely or adequate reports pursuant to the RI/FS Work Plan, where an extension for the report has not been granted in writing prior to the due date by EPA's Project Coordinator:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$ 143	1 st through 14 th day
\$ 710	15 th through 30 th day
\$ 25,000	31 st day and beyond

c. The following stipulated penalties shall accrue per day for failure to submit timely or adequate quarterly progress reports: \$143 per violation, for the first week of noncompliance; \$500 per day, per violation, for the 8th through 14th day of noncompliance; \$710 per day, per violation, for the 15th day through the 30th day; and \$2,000 per day, per violation, for all violations lasting beyond 30 days.

61. In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 79 of Section XX (Reservation of Rights by EPA), Respondent shall be liable for a stipulated penalty in the amount of \$50,000.

62. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: (1) with respect to a deficient submission under Section X (EPA Approval of Plans and Other Submissions), during the period, if any, beginning on the 31st day after EPA's receipt of such submission until the date that EPA notifies Respondent of any deficiency; and (2) with respect to a decision by the EPA Management Official designated in Paragraph 58 of Section XV (Dispute Resolution), during the period, if any, beginning on the 21st day after the Negotiation Period begins until the date that the EPA Management Official issues a final decision regarding such dispute. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.

63. Following EPA's determination that Respondent has failed to comply with a requirement of this Settlement Agreement, EPA may give Respondent written notification of the same and describe the noncompliance. EPA may send Respondent a written demand for the payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified Respondent of a violation.

64. All penalties accruing under this Section shall be due and payable to EPA within 30 days of Respondent's receipt from EPA of a demand for payment of the penalties, unless Respondent invokes the dispute resolution procedures in accordance with Section XV (Dispute Resolution). All payments to EPA under this Section shall indicate that the payment is for stipulated penalties, shall reference the EPA Region, the Site/Spill ID Number 08-94, the EPA Docket Number ^{CERCLA-08-2009-0007} , the name and address of the party(ies) making payment, shall be paid by certified or cashier's check(s) made payable to "EPA Hazardous Substances Superfund," and shall be mailed to:

Regular mail:

Mellon Bank
EPA Region VIII
Attn: Superfund Accounting
Post Office Box 360859
Pittsburgh, Pennsylvania 15251-6859

Express Mail:

Mellon Bank
3 Mellon Bank Center
ROOM#153-2713
Pittsburgh, Pennsylvania 15259

or other such address as EPA may designate in writing, or by wire transfer to:

ABA=021030004
TREAS NYC/CTR/
BNF=/AC-68011008

Wire transfers must be sent to the Federal Reserve Bank in New York.

Copies of check(s) paid pursuant to this Section, and any accompanying transmittal letter(s) shall be sent to:

Kathryn Hernandez
Remedial Project Manager
Superfund Remedial Section, 8EPR-RA
US EPA, Region VIII,
1595 Wynkoop Street
Denver, Colorado 80202

and to:

Maureen O'Reilly
Superfund Enforcement

U.S. EPA Region 8
8ENF-RC
1595 Wynkoop Street
Denver, CO 80202

65. At the time of payment, Respondent shall send notice that payment has been made by email to acctsreceivable.cinwd@epa.gov, and to:

EPA Cincinnati Finance Office
26 Martin Luther King Drive
Cincinnati, Ohio 45268

66. The payment of penalties shall not alter in any way Respondent's obligation to complete performance of the Work required under this Settlement Agreement.

67. Penalties shall continue to accrue as provided in Paragraph 62 during any dispute resolution period, but need not be paid until 15 days after the dispute is resolved by agreement or by receipt of EPA's decision.

68. If Respondent fails to pay stipulated penalties when due, EPA may institute proceedings to collect the penalties, as well as Interest. Respondent shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 64.

69. Nothing in this Settlement Agreement shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Respondent's violation of this Settlement Agreement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Section 122(l) of CERCLA, 42 U.S.C. § 9622(l), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Provided, however, that EPA shall not seek civil penalties pursuant to Section 122(l) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided herein, except in the case of willful violation of this Settlement Agreement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Section XX (Reservation of Rights by EPA), Paragraph 79. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement Agreement.

XVII. FORCE MAJEURE

70. Respondent agrees to perform all requirements of this Settlement Agreement within the time limits established under this Settlement Agreement, unless the performance is delayed by a *force majeure*. For purposes of this Settlement Agreement, *force majeure* is defined as any event arising from causes beyond the control of Respondent or of any entity controlled by Respondent, including but not limited to its

contractors and subcontractors, which delays or prevents performance of any obligation under this Settlement Agreement despite Respondent's best efforts to fulfill the obligation. *Force majeure* does not include financial inability to complete the Work or increased cost of performance.

71. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement Agreement, whether or not caused by a *force majeure* event, Respondent shall notify EPA orally within 48 hours of when Respondent first knew that the event might cause a delay. Within five days thereafter, Respondent shall provide to EPA in writing an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondent's rationale for attributing such delay to a *force majeure* event if they intend to assert such a claim; and a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health, welfare or the environment. Failure to comply with the above requirements shall preclude Respondent from asserting any claim of *force majeure* for that event for the period of time of such failure to comply and for any additional delay caused by such failure.

72. If EPA agrees that the delay or anticipated delay is attributable to a *force majeure* event, the time for performance of the obligations under this Settlement Agreement that are affected by the *force majeure* event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the *force majeure* event shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a *force majeure* event, EPA will notify Respondent in writing of its decision. If EPA agrees that the delay is attributable to a *force majeure* event, EPA will notify Respondent in writing of the length of the extension, if any, for performance of the obligations affected by the *force majeure* event.

XVIII. PAYMENT OF RESPONSE COSTS

73. Payments of Future Response Costs.

a. Respondent shall pay EPA all Future Response Costs not inconsistent with the NCP. On a periodic basis, EPA will send Respondent a bill requiring payment that includes a Region 8 Cost Summary. Respondent shall make all payments within 30 days of receipt of each bill requiring payment, except as otherwise provided in Paragraph 74 of this Settlement Agreement. Payment shall be made to EPA by Electronic Funds Transfer ("EFT") in accordance with current EFT procedures to be provided to Respondent by EPA Region 8, and shall be accompanied by a statement identifying the name and address of the party(ies) making payment, the Site name, the EPA Region and Site/Spill ID Number 08-94, and the EPA docket number for this action.

b. At the time of payment, Respondent shall send notice that payment has been made to:

Kathryn Hernandez
Remedial Project Manager
Superfund Remedial Section, 8EPR-RA
US EPA, Region VIII,
1595 Wynkoop Street
Denver, Colorado 80202

and to:

Maureen O'Reilly
Superfund Enforcement
U.S. EPA Region 8
8ENF-RC
1595 Wynkoop Street
Denver, CO 80202

and by email to acctsreceivable.cinwd@epa.gov, and to:

EPA Cincinnati Finance Office
26 Martin Luther King Drive
Cincinnati, Ohio 45268

c. The total amount to be paid by Respondent pursuant to Subparagraph 73(a) shall be deposited in the Richardson Flat Operable Unit #2 Special Account within the EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.

74. If Respondent does not pay Future Response Costs within 30 days of Respondent's receipt of a bill, Respondent shall pay Interest on the unpaid balance of such Future Response Costs. The Interest on unpaid Future Response Costs shall begin to accrue on the date of the bill and shall continue to accrue until the date of payment. If EPA receives a partial payment, Interest shall accrue on any unpaid balance. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondent's failure to make timely payments under this Section, including but not limited to, payments of stipulated penalties pursuant to Section XVI. Respondent shall make all payments required by this Paragraph in the manner described in Paragraph 73.

75. Respondent may contest payment of any Future Response Costs under Paragraph 73 if it determines that EPA has made an accounting error or if it believes EPA incurred excess costs as a direct result of an EPA action that was inconsistent with the NCP. Such objection shall be made in writing within 30 days of receipt of the bill and

must be sent to the EPA Project Coordinator. Any such objection shall specifically identify the contested Future Response Costs and the basis for objection. In the event of an objection, Respondent shall within the 30 day period pay all uncontested Future Response Costs to EPA in the manner described in Paragraph 73. Simultaneously, Respondent shall establish an interest-bearing escrow account in a federally-insured bank duly chartered in the State of Utah and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondent shall send to the EPA Project Coordinator a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. Simultaneously with establishment of the escrow account, Respondent shall initiate the Dispute Resolution procedures in Section XV (Dispute Resolution). If EPA prevails in the dispute, within 5 days of the resolution of the dispute, Respondent shall pay the sums due (with accrued interest) to EPA in the manner described in Paragraph 73. If Respondent prevails concerning any aspect of the contested costs, Respondent shall pay that portion of the costs (plus associated accrued interest) for which they did not prevail to EPA in the manner described in Paragraph 73. Respondent shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XV (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondent's obligation to reimburse EPA for its Future Response Costs.

XIX. COVENANT NOT TO SUE BY EPA

76. In consideration of the actions that will be performed and the payments that will be made by Respondent under the terms of this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, EPA covenants not to sue or to take administrative action against Respondent pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work and Interim and Future Response Costs. This covenant not to sue shall take effect upon the Effective Date. This covenant not to sue is conditioned upon the complete and satisfactory performance by Respondent of its obligations under this Settlement Agreement, including, but not limited to, payment of Interim and Future Response Costs pursuant to Section XVIII. This covenant not to sue extends only to Respondent and does not extend to any other person.

XX. RESERVATIONS OF RIGHTS BY EPA

77. Except as specifically provided in this Settlement Agreement, nothing herein shall limit the power and authority of EPA or the United States to take, direct, or Settlement Agreement all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing herein shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, from taking other legal or

equitable action as it deems appropriate and necessary, or from requiring Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law.

78. The covenant not to sue set forth in Section XIX above does not pertain to any matters other than those expressly identified therein. EPA reserves, and this Settlement Agreement is without prejudice to, all rights against Respondent with respect to all other matters, including, but not limited to:

- a. claims based on a failure by Respondent to meet a requirement of this Settlement Agreement;
- b. liability for Site Past Response Costs.
- c. liability for costs not included within the definition Interim and Future Response Costs;
- d. liability for performance of response action other than the Work;
- e. criminal liability;
- f. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;
- g. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site; and
- h. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site.

79. Work Takeover. In the event EPA determines that Respondent has ceased implementation of any portion of the Work, is seriously or repeatedly deficient or late in its performance of the Work, or is implementing the Work in a manner which may cause an endangerment to human health or the environment, EPA may assume the performance of all or any portions of the Work as EPA deems necessary ("Work Takeover"). EPA shall issue a written notice ("Work Takeover Notice") to Respondent before a Work Takeover. Any Work Takeover Notice will specify the grounds upon which such notice was issued and will provide Respondent a period of 10 days within which to remedy the circumstances. If, after expiration of the 10-day notice period, Respondent has not remedied to EPA's satisfaction the circumstances giving rise to EPA's issuance of the Work Takeover Notice, EPA may at any time thereafter assume the performance of all or any portion of the Work as EPA determines necessary. EPA shall notify Respondent of a Work Takeover in writing. In the event, however, where an emergency situation or immediate threat to public health or welfare or the environment exists, EPA will not issue a Work Takeover Notice to Respondent and may at any time assume the performance of all or any portion of the Work as EPA determines necessary. Respondent may invoke the

procedures set forth in Section XV (Dispute Resolution) to dispute EPA's determination that takeover of the Work is warranted under this Paragraph. Costs incurred by EPA in performing the Work pursuant to this Paragraph shall be considered Future Response Costs that Respondent shall pay pursuant to Section XVIII (Payment of Response Costs). Notwithstanding any other provision of this Settlement Agreement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

XXI. COVENANT NOT TO SUE BY RESPONDENT

80. Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, Interim or Future Response Costs, or this Settlement Agreement, including, but not limited to:

a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;

b. any claim arising out of the Work or arising out of the response actions for which Interim or Future Response Costs have or will be incurred, including any claim under the United States Constitution, the Utah Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law; or

c. any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, relating to the Work or payment of Interim or Future Response Costs.

81. Except as expressly provided in this Section XXI, Paragraph 83 (Non-Exempt De Micromis Waiver), these covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to the reservations set forth in Paragraphs 83 (b), (c), and (e) - (g), but only to the extent that Respondent's claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

82. Nothing in this Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

83. Non-Exempt De Micromis Waiver.

Respondent agrees not to assert any claims and to waive all claims or causes of action (including but not limited to claims or causes of action under Sections 107(a) and 113 of CERCLA) that it may have for all matters relating to the Site against any person where the person's liability to Respondent with respect to the Site is based solely on having

arranged for disposal or treatment, or for transport for disposal or treatment, of hazardous substances at the Site, or having accepted for transport for disposal or treatment of hazardous substances at the Site, if all or part of the disposal, treatment, or transport occurred before April 1, 2001, and the total amount of material containing hazardous substances contributed by such person to the Site was less than 110 gallons of liquid materials or 200 pounds of solid materials.

84. The Non-Exempt De Micromis Waiver in Paragraph 83 above shall not apply with respect to any defense, claim, or cause of action that Respondent may have against any person meeting the above criteria if such person asserts a claim or cause of action relating to the Site against Respondent. This waiver also shall not apply to any claim or cause of action against any person meeting the above criteria if EPA determines:

a. that such person has failed to comply with any EPA requests for information or administrative subpoenas issued pursuant to Section 104(e) or 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) or 9622(e), or Section 3007 of the Solid Waste Disposal Act (also known as the Resource Conservation and Recovery Act or "RCRA"), 42 U.S.C. § 6972, or has impeded or is impeding, through action or inaction, the performance of a response action or natural resource restoration with respect to the Site, or has been convicted of a criminal violation for the conduct to which this waiver would apply and that conviction has not been vitiated on appeal or otherwise; or

b. that the materials containing hazardous substances contributed to the Site by such person have contributed significantly, or could contribute significantly, either individually or in the aggregate, to the cost of response action or natural resource restoration at the Site.

XXII. OTHER CLAIMS

85. By issuance of this Settlement Agreement, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent.

86. Except as expressly provided in Section XXI, Paragraph 83 (The Non-Exempt De Micromis Waiver), and Section XIX (Covenant Not to Sue by EPA), nothing in this Settlement Agreement constitutes a satisfaction of or release from any claim or cause of action against Respondent or any person not a party to this Settlement Agreement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

87. No action or decision by EPA pursuant to this Settlement Agreement shall give rise to any right to judicial review except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

88. Respondent shall, with respect to any suit or claim brought by them for matters related to this Settlement Agreement, notify the United States in writing no later than 60 days prior to the initiation of such suit or claim.

89. Respondent shall, with respect to any suit or claim brought against them for matters related to this Settlement Agreement, notify in writing the United States within ten days of service of the complaint on Respondent. In addition, Respondent shall notify the United States within ten days of service or receipt of any Motion for Summary Judgment and within ten days of receipt of any order from a court setting a case for trial.

XXIII. CONTRIBUTION

90. a. The Parties agree that this settlement constitutes an administrative settlement for purposes of Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), and that each Respondent is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), or as may be otherwise provided by law, for "matters addressed" in this Settlement Agreement. The "matters addressed" in this Settlement Agreement are the Work and Interim and Future Response Costs.

b. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B), pursuant to which Respondent has, as of the Effective Date, resolved its liability to the United States for the Work and Interim and Future Response Costs.

c. Except as provided in Section XXI (Covenant not to Sue by Respondent), Paragraph 83 (The Non-Exempt De Micromis Waiver), nothing in this Settlement Agreement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Settlement Agreement. Except as provided in Paragraph 83 each of the Parties expressly reserves any and all rights (including, but not limited to, pursuant to Section 113 of CERCLA, 42 U.S.C. § 9613), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto. Nothing in this Settlement Agreement diminishes the right of the United States, pursuant to Sections 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

XXIV. INDEMNIFICATION

91. Respondent shall indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action arising from, or on account of negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, or subcontractors, in carrying out actions pursuant to this Settlement Agreement. In

addition, Respondent agrees to pay the United States all costs incurred by the United States, including but not limited to attorneys fees and other expenses of litigation and settlement, arising from or on account of claims made against the United States based on negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, subcontractors and any persons acting on its behalf or under its control, in carrying out activities pursuant to this Settlement Agreement. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondent in carrying out activities pursuant to this Settlement Agreement. Neither Respondent nor any such contractor shall be considered an agent of the United States.

92. The United States shall give Respondent notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondent prior to settling such claim.

93. Respondent waives all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Site. In addition, Respondent shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Site.

XXV. INSURANCE

94. At least 30 days prior to commencing any on-Site Work under this Settlement Agreement, Respondent shall secure, and shall maintain for the duration of this Settlement Agreement, comprehensive general liability insurance and automobile insurance with limits of 1 million dollars, combined single limit, naming the EPA as an additional insured. Within the same period, Respondent shall provide EPA with certificates of such insurance and a copy of each insurance policy. Respondent shall submit such certificates and copies of policies each year on the anniversary of the Effective Date. In addition, for the duration of the Settlement Agreement, Respondent shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Respondent in furtherance of this Settlement Agreement. If Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Respondent need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

XXVI. FINANCIAL ASSURANCE

95. Within 90 days of the Effective Date, Respondent shall establish and maintain financial security for the benefit of EPA in the amount of \$200,000.00 in one or

more of the following forms, in Settlement Agreement to secure the full and final completion of Work by Respondent:

- a. a surety bond unconditionally guaranteeing payment and/or performance of the Work;
- b. one or more irrevocable letters of credit, payable to or at the direction of EPA, issued by financial institution(s) acceptable in all respects to EPA equaling the total estimated cost of the Work;
- c. a trust fund administered by a trustee acceptable in all respects to EPA; and/or
- d. a policy of insurance issued by an insurance carrier acceptable in all respects to EPA, which ensures the payment and/or performance of the Work.

96. Any and all financial assurance instruments provided pursuant to this Section shall be in a form and substance satisfactory to EPA, determined in EPA's sole discretion. In the event that EPA determines at any time that the financial assurances provided pursuant to this Section (including, without limitation, the instrument(s) evidencing such assurances) are inadequate, Respondent shall, within 30 days of receipt of notice of EPA's determination, obtain and present to EPA for approval one of the other forms of financial assurance listed in Paragraph 95, above. In addition, if at any time EPA notifies Respondent that the anticipated cost of completing the Work has increased, then, within 30 days of such notification, Respondent shall obtain and present to EPA for approval a revised form of financial assurance (otherwise acceptable under this Section) that reflects such cost increase. Respondent's inability to demonstrate financial ability to complete the Work shall in no way excuse performance of any activities required under this Settlement Agreement.

97. If, after the Effective Date, Respondent can show that the estimated cost to complete the remaining Work has diminished below the amount set forth in Paragraph 95 of this Section, Respondent may, on any anniversary date of the Effective Date, or at any other time agreed to by the Parties, reduce the amount of the financial security provided under this Section to the estimated cost of the remaining Work to be performed. Respondent shall submit a proposal for such reduction to EPA, in accordance with the requirements of this Section, and may reduce the amount of the security after receiving written approval from EPA. In the event of a dispute, Respondent may seek dispute resolution pursuant to Section XV (Dispute Resolution). Respondent may reduce the amount of security in accordance with EPA's written decision resolving the dispute.

98. Respondent may change the form of financial assurance provided under this Section at any time, upon notice to and prior written approval by EPA, provided that EPA determines that the new form of assurance meets the requirements of this Section. In the event of a dispute, Respondent may change the form of the financial assurance only in accordance with the written decision resolving the dispute.

XXVII. INTEGRATION/APPENDICES

99. This Settlement Agreement and its appendices, plans, reports, and other RI/FS Work Plan deliverables that will be developed pursuant to this Settlement Agreement and become incorporated into and enforceable under this Settlement Agreement constitute the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement Agreement. The parties acknowledge that there are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Settlement Agreement. The following appendices are attached to and incorporated into this Settlement Agreement:

"Appendix A" is the RI/FS Work Plan.

"Appendix B" is a map of the Lower Silver Creek Site, Operable Unit 2 of the Richardson Flats Tailings Superfund Site.

XXVIII. ADMINISTRATIVE RECORD

100. EPA will determine the contents of the administrative record file for selection of the remedial action. Respondent shall submit to EPA documents developed during the course of the RI/FS upon which selection of the response action may be based. Upon request of EPA, Respondent shall provide copies of plans, task memoranda for further action, quality assurance memoranda and audits, raw data, field notes, laboratory analytical reports and other reports. Upon request of EPA, Respondent shall additionally submit any previous studies conducted under state, local or other federal authorities relating to selection of the response action, and all communications between Respondent and state, local or other federal authorities concerning selection of the response action. At EPA's discretion, Respondent shall establish a community information repository at or near the Site, to house one copy of the administrative record.

XXIX. EFFECTIVE DATE AND SUBSEQUENT MODIFICATION

101. This Settlement Agreement shall be effective the day upon which this Settlement Agreement has been signed by all three EPA officials.

102. This Settlement Agreement may be amended by mutual agreement of EPA and Respondent. Amendments shall be in writing and shall be effective when signed by EPA. EPA Project Coordinators do not have the authority to sign amendments to the Settlement Agreement.

103. No informal advice, guidance, suggestion, or comment by the EPA Project Coordinator or other EPA representatives regarding reports, plans, specifications, schedules, or any other writing submitted by Respondent shall relieve Respondent of its obligation to obtain any formal approval required by this Settlement Agreement, or to

comply with all requirements of this Settlement Agreement, unless it is formally modified.

XXX. NOTICE OF COMPLETION OF WORK

104. When EPA determines that all Work has been fully performed in accordance with this Settlement Agreement, with the exception of any continuing obligations required by this Settlement Agreement, including but not limited to payment of Interim and Future Response Costs or record retention, EPA will provide written notice to Respondent. If EPA determines that any such Work has not been completed in accordance with this Settlement Agreement, EPA will notify Respondent, provide a list of the deficiencies, and require that Respondent modify the RI/FS Work Plan if appropriate in order to correct such deficiencies, in accordance with Paragraph 34 (Modification of the RI/FS Work Plan). Failure by Respondent to implement the approved modified RI/FS Work Plan shall be a violation of this Settlement Agreement.

Agreed this 26th day of September, 2009.


For Respondent United Park City Mines Company

By: Kerry Bell


Title: Vice President

It is so ORDERED AND AGREED this 29th day of September, 2009.

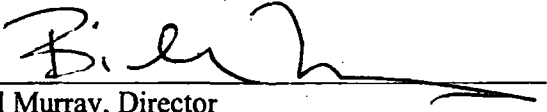
BY:

 DATE: 9/28/09
Matthew Cohn, Supervisory Attorney
Legal Enforcement Program
U.S. Environmental Protection Agency, Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

BY:

 DATE: 9/28/09
Kelcey Jand, Acting Director
RCRA & CERCLA Technical Enforcement Program
U.S. Environmental Protection Agency, Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

BY:

 DATE: 9/29/09
Bill Murray, Director
Superfund Remedial Response Program
U.S. Environmental Protection Agency, Region 8
1595 Wynkoop Street
Denver, CO 80202-1129

EFFECTIVE DATE: September 29, 2009

**Richardson Flat OU2
Remedial Investigation/Feasibility Study
Work Plan
Lower Silver Creek, Operable Unit 2,
Richardson Flat Tailings Site
Park City, Utah**

EPA Site ID: UT980952840

September 24, 2009

Prepared for:

**United Park City Mines
P.O. Box 1450
Park City, UT 84060**

Prepared by:

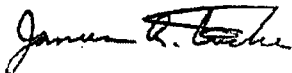
**Resource Environmental Management Consultants d.b.a. RMC
8138 South State Street, Suite 2A
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Fax: (801) 255-3266**

**Richardson Flat OU2
Remedial Investigation/Feasibility Study
Work Plan
Lower Silver Creek, Operable Unit 2,
Richardson Flat Tailings Site
Park City, Utah**

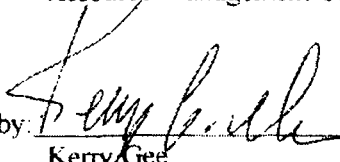
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Prepared by: 
Jim Fricke
Resource Management Consultants

Date: 9/25/2009

Reviewed by: 
Kerry Gee
United Park City Mines Company

Date:

Reviewed by: _____
Kathryn Hernandez
USEPA Remedial Project Manager

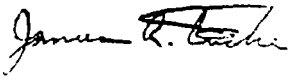
Date:

**Richardson Flat OU2
Remedial Investigation/Feasibility Study
Work Plan
Lower Silver Creek, Operable Unit 2,
Richardson Flat Tailings Site
Park City, Utah**

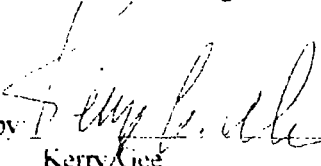
September 24, 2009

**Prepared for:
United Park City Mines
P.O. Box 1450
Park City, UT 84060**

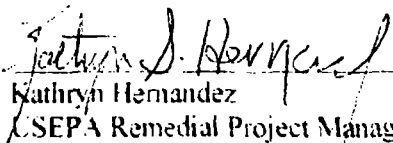
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Reviewed by: 
Kerry Gies
United Park City Mines Company

Date:

Reviewed by: 
Kathryn Hernandez
USEPA Remedial Project Manager

Date: 9/25/2009

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EXECUTIVE SUMMARY

This Work Plan documents the procedures to be used to conduct a Remedial Investigation/Feasibility Study (RI/FS) at the Lower Silver Creek site designated as Operable Unit 2 (OU2) of the Richardson Flat Tailings Site, Park City, Utah (EPA Site ID: UT980952840). This Work Plan was prepared by Resource Management Consultants, Inc. (RMC) for United Park City Mines Company (United Park). The purpose of the Remedial Investigation/Feasibility Study for OU2 is to investigate the nature and extent of contamination at OU2 and develop and evaluate potential remedial alternatives in an area which includes an approximately 4.5 mile long section of Lower Silver Creek through property owned by multiple property owners. The Site is part of the historic Park City Mining District which contained mining and mineral processing facilities in operation from the late 1800's through 1983.

The primary Contaminants of Concern (COCs) are arsenic, cadmium, lead and zinc found in soil, sediment, surface water and shallow groundwater (Tetra Tech, 2008b). The sources of contamination at OU2 are related to on-Site tailings and impacts from multiple sources located upstream in the Silver Creek Watershed.

Extensive site characterization has been performed by Tetra-Tech (for the United States Environmental Protection Agency); the United States Geological Survey and the State of Utah. The initial phase of the Remedial Investigation will entail conducting a detailed review of data collected in previous investigations. The results of the data review will be used to determine the gaps in the existing dataset. The second phase of site characterization will entail collecting the necessary field data to fill the data gaps in sufficient detail to define the nature and extent of contamination and prepare the Remedial Investigation Report.

Risk Assessment at OU2 will utilize basic information in the Baseline Human Health and Ecological Risk Assessments conducted for Richardson Flat Tailings Site OU1. Site information will be assessed to determine the applicability of the OU1 Risk Assessments for OU2. Operable Units 1 and 2 contain like and similar wastes and are located adjacent to each other. In the unlikely event that the results of the RI indicate a significant difference in Site conditions between OU1 and OU2, additional Risk Assessment work will be conducted.

The information presented in the Remedial Investigation Report and Risk Assessments will be used to conduct a Remedial Feasibility Study. The Feasibility Study (FS) will develop and screen remedial technologies and process options as required by the NCP. The FS will include a detailed analysis of potential remedial alternatives and rank them according to the nine criteria specified by the National Contingency Plan. The Feasibility Study will present a Preferred Alternative based on the detailed analysis of potential remedial alternatives.

1.0 INTRODUCTION

This Remedial Investigation/Feasibility Study Work Plan is presented to describe procedures to complete a Remedial Investigation/Feasibility Study (RI/FS) at Operable Unit 2 of the Richardson Flat Tailings Site, Lower Silver Creek (the Site). This Work Plan was prepared pursuant to the "Administrative Settlement and Order on Consent for Remedial Investigation/Feasibility Study for Lower Silver Creek, Operable Unit 2, Richardson Flat Tailings Site, Park City, Utah EPA Site ID: UT980952840" (AOC). The Respondent did not own or operate any of the historic operations located on-Site.

The Site is located two miles east of Park City, in Summit County, Utah. The Site is part of the Silver Creek Watershed. Mining operations around Park City and in the Silver Creek Watershed included mining of approximately 13 million tons of ore between 1875 and 1981. The Site extends approximately 4.5 miles along the banks of Silver Creek from U. S. Highway 40 on the southern end of the Site downstream to Interstate 80 on the northern end of the Site. A Site Location Map is presented in Figure 1-1.

This Work Plan describes current knowledge about the Site and its history, summarizes investigation and characterization work completed to date, presents potential pathways of contaminant migration and describes the additional investigative, risk assessment, feasibility study and community relations work to be performed. This Work Plan also presents a description of the anticipated reports and deliverables and a project schedule.

This Work Plan has been prepared to meet the requirements for RI/FS Work Plans as described in "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA, EPA 540/G-89-004" (EPA, 1988). The Work Plan was prepared following the Statement of Work presented in the OU2 AOC. The Work Plan includes the following sections:

- Section 1 – Introduction
- Section 2 – Site Background and Setting
- Section 3 – Initial Evaluation
- Section 4 – Work Plan Rational
- Section 5 – RI/FS Tasks
- Section 6 – Costs and Key assumptions
- Section 7 – Schedule
- Section 8 – Project Management
- Section 9 – References

1.1 Objectives

The Site has been the subject of previous investigative work conducted by the State of Utah and EPA. Therefore, the initial investigative focus of this Work Plan is to address identified data gaps and assessment work required to complete the RI/FS. Previous investigative studies at the Site have been prepared by:

- Tetra-Tech, for the United States Environmental Protection Agency;
- The United States Environmental Protection Agency;
- The United States Geological Survey;
- The State of Utah; and
- United Park City Mines Company.

A listing of applicable studies is presented in Section 3.0.

The following general RI/FS objectives are defined in the AOC:

- Determine the nature and extent of contamination and any threat to public health, welfare, or the environment caused by the release or threatened release of hazardous substances, pollutants or contaminants at or from the Site.
- Identify and evaluate remedial alternatives to prevent, mitigate or otherwise respond to or remedy any release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site, by conducting a Feasibility Study.

2.0 SITE BACKGROUND AND SETTING

Silver Creek begins in the Wasatch Mountains south of Park City, Utah, and lies within the Weber River Basin in Summit County, Utah. The Site is situated north and east of US Highway 40, bounded by US Highway 40 on its southern end and Interstate 80 to the north (Figure 1-1). It is located in Township 1 South, Range 4 East in Sections 10, 11, 15, 14, 22, 23, 27, 26, and 35. The Rail Trail State Park runs north-south through the Site, paralleling the valley bottom between the floodplain and higher ground to the east. The Rail Trail is a former Union Pacific Railroad rail bed. The Site includes the floodplain and riparian habitat of Silver Creek and a portion of the upland areas immediately adjacent to Silver Creek. A formal Site boundary will be determined as part of the RI/FS. A preliminary boundary, however, has been determined through the work performed by Tetrattech for EPA. This boundary is also the subject of a Summit County overlay zone addressing certain aspects of the contamination as it relates to potential development. The region has experienced significant development.

In some reaches, Silver Creek is a perennial stream draining the Wasatch Mountains fed by precipitation including snowmelt and stormwater runoff. Silver Creek is classified for beneficial

use Class 3A for the protection of cold water fish and cold water species (DERR, 2002). Water rights for domestic water, stock, irrigation, and recreation are held by public and private entities in Silver Creek. Portions of the Site are flood irrigated, and the stream flow quantities are impacted by irrigation, at times taking the majority of water out of Silver Creek. Irrigation return flows to Silver Creek may create impacts to water quality. Several irrigation ditches have been constructed in the Site. United States Geological Survey (USGS) stream flow gauging station 10129900 is located within the Site downstream of the Snyderville Water Reclamation Facility outfall.

The Site is located within a complex fold and thrust belt later intruded and overlain by volcanic rocks. The area located within the Silver Creek floodplain is composed of colluvium and alluvium derived from sedimentary and volcanic formations located within the Silver Creek watershed. Wetland and upland areas within the Site are generally underlain by the Keetley Formation volcanic rocks which may be more than 1,000 feet thick (Weston, 1999, in RMC, 2004a).

The Site is composed of wetland and upland habitats and plant communities. Currently there are no residential properties or populations residing within the Preliminary Site Boundary.

2.1 Upstream Sources of Tailings and Metals Loading

Some of the sites upstream of Richardson Flat have impacted surface water and sediment conditions below Richardson Flat (EPA, 2005). These areas have the potential to re-impact OU2 if remediation is not conducted in an upstream to downstream direction in the Silver Creek watershed. Impacted areas located upstream of OU2 include but are not limited to:

Empire Canyon

Empire Canyon is a CERCLIS site which was closed through a non-time critical removal action. It is an ephemeral drainage located upstream from Park City and is the location of historic mine sites and mineral facilities. Prior to remediation efforts, it was identified as a possible source of contamination through work conducted through the Upper Silver Creek Watershed Stakeholders Group. Empire Canyon typically flows from April through mid-July. A Removal Action was recently completed in Empire Canyon the overall objective of which was to reduce surface water contact with contaminated materials resulting in decreased sediment loading and dissolved metals loading to Silver Creek.

Judge Tunnel

The Judge Tunnel is currently a drinking water source for Park City. Water is discharged from the Judge Tunnel when turbidity levels reach a certain level or when the quantity of water flowing in the tunnel exceeds the demand of the drinking water system. High turbidity generally occurs when workers are in the tunnel or during high runoff that occurs in the spring and early summer. Low demand can occur at any time but appears to be most frequent in the morning. Judge Tunnel discharge water currently exceeds Silver Creek TMDL limitations.

Prospector Square

Prospector Square, a large residential and commercial development in the northeast part of Park City, was partially constructed on a large deposit of mill tailings. Prospector Square is located along Silver Creek about 1½ mile upstream from the Richardson Flat Tailings Site (ATSDR, 1988). Prospector Square groundwater is discharged by a pipe (typically referred to as the Prospector Drain), recommended to be installed by Dames and Moore to allow the tailings to dry out and houses to be built. During the 2002 USGS study conducted for the Silver Maple Claims, the USGS determined that the greatest mass loading of zinc in Silver Creek occurred at the Prospector Drain (USGS, 2002) which is located at the downstream end of Prospector Square. A passive biotreatment system was constructed in 2008 to treat a portion of the Prospector Drain discharge. However, a bypass vault was constructed in the event the flow exceeds the treatment capacity (PCMC, 2009). RMC estimates the biotreatment system only treats approximately 10 gallons per minute (gpm) of the Prospector Drain water. There has been no assessment of the impacts to Silver Creek from stormwater or snowmelt collected by residential infrastructure and discharged into Silver Creek particularly during a storm event. Prospector Square was the site of the Graselli Chemical Company (Graselli) mill. Graselli operated a processing facility that processed mill tailings and other materials to capture zinc to be used in paint pigments. Other entities operated the mill as well. It appears that spent waste materials from the facility were discharged directly into Silver Creek on lands downstream of Prospector Square.

Middle Reach

This area includes the reach of Silver Creek from the Prospector Drain to Richardson Flat OU1. It includes the Floodplain Tailings on the downstream end, Silver Maple Claims on the upstream end and other unnamed lands that are potential sources (areas of tailings). Multiple entities own or control lands in the Middle Reach.

Silver Maple Claim – The Silver Maple Claim area consists of land owned by the United States Bureau of Land Management (BLM). It begins at the Prospector Drain and continues downstream for approximately 2,155 feet. The Silver Maple Claim was assessed as part of a

USGS metals loading study (USGS, 2002) for a reach of Silver creek beginning at the Prospector Drain and extending about to a point where Silver Creek is crossed by U.S. 40. The results of the study indicate that the Silver Maple Claims site increases the metals load to Silver Creek. This parcel is the site of the Beggs Mill. This was a small processing facility that processed mill tailings and other materials. It appears that the waste material from this facility was discharged directly into Silver Creek.

Floodplain Tailings - The Floodplain tailings area is located directly upstream from Richardson Flat OU1 and OU2 in between State Route 248 and Us Highway 40. The Floodplain tailings area consists of an area of exposed tailings incised by Silver Creek Directly upstream from Richardson OU1. Its proximity to Silver Creek and data collected during the Richardson Flat RI/FS process indicates that the Floodplain Tailings as a possible source of contamination to Silver Creek.

Richardson Flat OU1

Silver Creek flows through the wetland area westerly of the main embankment of the Richardson tailings pond (Embankment Wetland). Remediation of this area is planned for the 2010/2011 construction season as part of the Richardson Flat RD/RA construction. Historical sampling completed as part of an NPDES permit requirement for the Ontario Mine operations tailings pond indicated that zinc levels in the South Diversion Ditch at times exceeded the current TMDL. Mitigation work completed in the early 1990's help correct this problem. Data collected since 2001 indicates that surface water emanating from the South Diversion Ditch in OU1 meets water quality standards and is diluting Silver Creek surface water metals concentrations (RMC, 2004a).

2.2 Site History

Mining in the Park City area began around 1869. The first shipment of ore, 40 tons, was shipped by wagon in July 1870 (DERR, 2002). Multiple mills operated along the banks of Silver Creek throughout the history of mining in Park City. The majority of milling companies were located upstream of Lower Silver Creek (DERR, 2002).

~~Tailings from the mining operations, and believed by EPA to have washed downstream and deposited in over-bank deposits in the floodplain throughout the Silver Creek Watershed including the Site. Irrigation diversions may also have spread the tailings and/or impacted Silver Creek waters to areas outside the floodplain (DERR, 2002).~~

No mining occurred on-Site. Mineral processing at the Site included the Big Four Mill, located near the present Pivotal Promontory access road, which was the primary mill operating within the Site. The Big Four was reportedly the third largest mill in Utah in 1916, consisting of a two month stockpile of 50,000 tons of ore and the capacity to process 1,800 tons of ore tailings per day (DERR, 2002, in Tetra Tech 2008b). The Big Four tailings field was reportedly 3.5 miles long by 400 to 1,200 feet wide and two inches to eight feet deep (Tetra Tech, 2008b).

3.0 INITIAL EVALUATION AND DATA ANALYSIS

This Section analyzes and evaluates current Site knowledge to describe:

- OU2 physical and biological characteristics;
- Contaminant source characteristics;
- Nature and extent of contamination;
- Contaminant fate and transport; and
- A preliminary assessment of human health and environmental impacts.

3.1 Previous Investigations and Existing Data

This Section lists previously conducted studies that contain data applicable to the OU2 RI/FS. Each study was initially evaluated to determine its applicability to OU2. The RI/FS will conduct a detailed evaluation of these studies to determine existing data gaps and the information required to fill them. Data quality from each source will be evaluated to determine applicability as screening level or definitive.

3.1.1 Richardson Flat OU1 RI/FS

The Richardson Flat Tailings Site (OU1) is currently in its second full year of Remedial Action (RA). Data presented in the following technical reports is applicable to OU2:

- Focused Remedial Investigation Report (RMC, 2004a, OU1 RI);
- Focused Feasibility Study (RMC, 2004a, OU1 FS);
- Screening Ecological Risk Assessment for Richardson Flat Tailings, SRC, 2002;
- Baseline Human Health Risk Assessment for Recreational Visitors at Richardson Flat Tailings, SRC, 2003;
- Record of Decision, Richardson Flat Tailings Site (ROD, EPA, 2005); and
- Remedial Design/Remedial Action Work Plan, Richardson Flat (RMC, 2008).

The data presented in the above described reports is applicable to OU2 for the following reasons:

- Contiguous nature of the two sites, they are connected by Silver Creek which flows beneath State Route 248;
- Like and similar ground conditions, Soils, COCs and materials (e.g. tailings);
- Similar aquatic and terrestrial habitat;
- Similar Remedial Action Objectives; and
- Similar sources of contamination.

3.1.2 Silver Creek Watershed

Data collected as part of the Upper Silver Creek Watershed sampling in 2000 is applicable to the OU2 RI/FS. Directly applicable data is limited to water and sediment samples collected at two locations in the upper reach of OU2. Sampling results are documented in the Following reports:

- Analytical Results for Surface Water Monitoring Activities Conducted May 2000, Addendum to the Sampling and Analysis Plan for Upper Silver Creek Watershed (RMC. 2000a);
- Analytical Results for Surface Water Monitoring Activities Conducted September and November 2000, Addendum to the Sampling and Analysis Plan for Upper Silver Creek Watershed (RMC. 2000b);

The data presented in the above described reports is applicable to OU2 for the following reasons:

- The data was collected within the Site (two locations); and
- The remaining data is applicable in demonstrating upstream impacts.

3.1.3 State of Utah

The State of Utah conducted one study that provides data applicable to the OU2 RI/FS:

- Innovative Assessment Analytical Results Report, Lower Silver Creek, Summit County, Utah, Prepared by the State of Utah Division of Environmental Response and Remediation (DERR, 2002).

One study prepared for the State of Utah contains data applicable to the OU2 RI/FS:

- Silver Creek Total Maximum Daily Load For Dissolved Zinc And Cadmium, Prepared by the Utah Department of Environmental Quality - Division of Water Quality (Baker et al, 2001).

The data presented in the above described reports is applicable to OU2 for the following reasons:

- A portion of the data was collected within the Site; and

- The remaining data is applicable in demonstrating upstream impacts.

3.1.4 Studies Conducted for EPA

Tetra Tech, Inc. (Tetra Tech) conducted work for EPA Region 8 in the Lower Silver Creek watershed. The following reports contain data and information applicable to the OU2 RI/FS:

- Field Sampling Plan for Upper and Lower Silver Creek Summit County, Utah (Tetra Tech, 2008a).
- Draft Lower Silver Creek Data Summary Report (Tetra Tech, 2008b).
- Lower Silver Creek Wetland Delineation Park City, Utah (Tetra Tech, 2008c).
- Reactive Transport Modeling under High Flow Conditions for Cadmium and Zinc, Lower Silver Creek, Utah (Tetra Tech, 2008d).

The data presented in the above described reports is applicable to OU2 for the following reason:

- The data was collected within the Site.

3.1.5 Studies Conducted by EPA

One report prepared by EPA provides data applicable to the OU2 RI/FS:

- Data Interpretation Report, Upper Silver Creek Watershed Surface Water/Stream Sediment Monitoring 2000 (EPA, 2001).

The data presented in the above described reports is applicable to OU2 for the following reasons:

- A limited portion of the data was collected within the Site; and
- The remaining data is applicable in demonstrating upstream impacts.

3.1.6 Studies Conducted By United States Geological Survey

The United States Geological Survey (USGS) has conducted two studies with data that is applicable to Lower Silver Creek:

- Trace-Metal Concentrations in Sediment and Water and Health of Aquatic Macroinvertebrate Communities of Streams Near Park City, Summit County, Utah (USGS, 2001)
- Quantification of Metal Loading to Silver Creek Through the Silver Maple Claims Area, Park City, Utah (USGS, 2002).

The data presented in the above described reports is applicable to OU2 for the following reasons:

- The reports contain data collected within the Site; and

- The reports contain data applicable in demonstrating upstream impacts.

3.2 Type and Volume of Waste Present

This Section summarizes the type and volume of waste present and the potential pathways of contaminant migration.

3.2.1 Types of Waste Present

The chemicals of concern (COCs) at OU2 are zinc, cadmium, lead, and arsenic (Tetra Tech, 2008b). The media affected by these contaminants are surface water, groundwater, sediment and soils (Tetra Tech, 2008b). Waste present at the Site consists of mine processing waste impacted soils and sediment. The contamination is primarily composed of mill tailings containing elevated concentrations of zinc, cadmium, lead and arsenic that are generally located in the Silver Creek Floodplain.

Studies conducted by the EPA and State of Utah indicated high maximum concentrations of lead (61,822 mg/kg), arsenic (6,696 mg/kg), zinc (169,890 mg/kg) and cadmium (295 mg/kg) in certain soils within the Site. The range of concentrations found on-Site likely range from local background values to the described maximums.

3.2.2 Volume of Waste Present

As stated in the AOC, EPA estimates that there are 1,479,000 cubic yards of mining waste, extending over 400 acres along the floodplain of the Silver Creek within OU2, including wetlands. Data collected as part of the RI/FS will confirm this estimate and if necessary provide a more accurate representation of on-Site waste volumes and their spatial distribution.

Within the initial Site boundary there are two primary tailings deposit areas of concern, the Atkinson Tailing Deposit and the Big Four Exploration Company Tailing Deposit. On-Site contamination is also due to the historic on-Site operation of the Big Four Mill, which reprocessed tailings washed down from the upper Silver Creek watershed. The Respondent did not own or operate the Atkinson Tailing Deposit, Big Four Tailing Deposit, or the Big Four Mill. The extent of these areas and the associated volumes of waste have not been determined at this time.

The Site is adjacent to and downstream of Richardson Flat OU1, separated by Utah State Route 248. According to the OU1 Record of Decision, OU1 was, immediately prior to the commencement of remedial activities, only a minor contributor to the current level of metal contamination in Silver Creek (ROD for OU1, Section 5.6.1).

3.3 Potential Pathways of Contaminant Migration and Preliminary Public Health and Environmental Impacts

Based on existing data, including the Risk Assessment conducted at OU1, respondent has identified three potential contaminant migration pathways: air, groundwater and surface water.

The Baseline Human Health Risk Assessment for Recreational Visitors at Richardson Flat Tailings (BHHRA, SRC, 2003) conducted for OU1 concluded that *"For all evaluated scenarios (low intensity, high intensity, CTE, RME) non-cancer risks are below a hazard Index of one. Additionally, all cancer risks were estimated to be within USEPA's acceptable risk range of one in a million to one in 100,000"*. These findings should be analogous for recreational users in OU2.

3.3.1 Air

This pathway is associated with potential releases to air by wind-blown tailings. Releases to air have not been documented at OU2. With the exception of two mounds of tailings located just north of Highway 248. All contamination is covered by vegetation and the potential release of contaminants to the air pathway would be considered minimal.

This pathway has been reduced because the tailings are currently protected with a vegetative cover. The remaining minor areas of exposed tailings would present only a de minimus potential for migration through the air pathway.

Potential human health and environmental impacts include:

- Direct contact with tailings; and
- Uptake through ingestion.

The OU2 RI/FS will determine whether additional remedial measures are necessary to prevent further contaminant migration.

3.3.2 Groundwater

This pathway is associated with potential releases to groundwater as the result of leaching of metals from the tailings and hydraulic connectivity between saturated tailings and Site groundwater systems (both shallow and deep). The primary sources of contamination to groundwater in OU2 include contamination from upstream sources and substances leached from on-Site tailings. Upstream sources include the Judge Tunnel, Prospector Drain and Middle Reach as documented in Section 2.1. The potential exposure for terrestrial or aquatic biota would be ingestion of surface water and/or sediments that have been affected by contaminated

shallow groundwater in areas of upward hydraulic gradients. The primary exposure for Human Health would be the ingestion of shallow groundwater, which is not currently being utilized on-Site.

The results of Site studies conducted for EPA (Tetra Tech, 2008b) indicate that the groundwater quality observed in shallow piezometers screened within the tailings had much higher metals concentrations than in those screened below the tailings. Data collected as part of the OU1 RI indicated a low potential for downward leaching (RMC, 2004a). The low potential for downward leaching as demonstrated in OU1 is confirmed by on-Site data in OU2. Therefore, in a situation analogous to OU1, the downward leaching of contaminated groundwater into the deep bedrock aquifer is not expected to be a significant pathway.

Work conducted in OU1 (RMC, 2004a) indicated that the potential for the migration of contaminants to groundwater supplies used for drinking water sources is minimal as evidenced by:

- Data collected as part of the OU1 RI indicated a low potential for downward leaching as evidenced by low metals concentrations in native soils underlying the tailings.
- There is no apparent hydraulic connection between groundwater stored in the tailings and the underlying aquifer(s) within the Keetley Volcanic rocks developed as a groundwater supply by downstream Public Water Systems (MWH Americas Report Appendix 5, in OU1 RI, RMC, 2004a).
- Water quality samples collected from Public Water System wells tapping the Keetley Volcanic rocks along the Silver Creek Drainage meet Utah Division of Drinking Water Standards (MWH Americas Report Appendix 5, in OU1 RI, RMC, 2004a).

Potential human health and environmental impacts include:

- Ingestion of groundwater; and
- Ground to surface water contamination.

Previously collected data (Section 3.1) and any additional data, if required, will be used in the OU2 RI to determine the potential impacts to shallow and deep groundwater located beneath the Site. The OU2 RI/FS will determine potential remedies to mitigate any potential groundwater impacts.

3.3.3 Surface Water

This pathway is associated with release to surface water as the result of leaching of metals from the tailings materials. The potential exposure for terrestrial or aquatic biota would be ingestion

of surface water that has been impacted by metals. As with groundwater, tailings and upstream sources are the primary potential source of contamination to surface water. Surface water has the potential to come into direct contact with tailings.

Upstream sources include the Judge Tunnel, Prospector Drain and Middle Reach as documented in Section 2.1. Water quality at collected at OU1 since at least 2001 indicates that water discharging from the South Diversion Ditch is diluting upstream contamination as it enters Lower Silver Creek (RMC, 2004a).

Potential human health and environmental impacts include:

- Direct contact by aquatic species;
- Potential ingestion of surface water; and
- Incidental dermal exposures related to potential splashing and wading during warm weather.

The OU2 RI will include, if needed, surface water investigations as required to fill in existing data gaps and further evaluate Site conditions sufficiently to determine any potential impacts to receptors. The OU2 RI will determine potential remedies to mitigate any potential surface water impacts.

3.4 Preliminary Identification of Operable Units

The Site is being managed as one Operable Unit, Richardson Flat Tailings Site OU2. The Lower Silver Creek Site is located immediately downgradient from Richardson Flat Tailings Site OU1.

3.5 Project Scoping Summary

This Section presents the initial Remedial Action Objectives and describes the range of Potential Remedial Action Alternatives for the Site.

3.5.1 Preliminary Identification of Remedial Action Objectives and Alternatives

The preliminary Remedial Action Objectives for the Site include:

Surface Water

- Reduce risks to aquatic receptors in the channel and associated wetland areas.
- Attempt to bring Lower Silver Creek into compliance with Utah water quality standards.
- Allow for a variety of future recreational uses; and
- Control of contaminant migration in surface water to the extent practical.

Groundwater

- Eliminate future groundwater use and withdrawal at the Site; and
- Control of contaminant migration in groundwater to the extent practical.

Sediments

- Reduce risks to wildlife receptors in the channel and wetland areas such that hazard indexes for lead are less than or equal to one; and
- Control contaminant migration in sediments to the extent practical.

Tailings and soils

- Control contaminant migration in soils to the extent practical;
- Minimize risks of lead and arsenic exposure to recreational users,
- Allow for a variety of future land uses; and
- Minimize post-cleanup disturbance of tailings and contaminated soil. Provide controls for ensuring any necessary disturbance is controlled.

The above-described preliminary Remedial Action Objectives are consistent with the OU2 AOC and Statement of Work.

3.5.2 Remedial Action Alternatives

Remedial alternatives for the Site will be developed and screened following the completion and EPA acceptance of the OU2 RI report. The screening will be conducted as part of the OU2 FS and will evaluate methods that reduce toxicity, mobility and the volume of waste to provide adequate protection of human health and the environment. Potential remedial options will range from No Action, as specified by the National Contingency Plan (NCP), to options including removal, containment and treatment.

The OU2 RI/FS will present a detailed comparative analysis of alternatives based on the nine criteria as specified by the NCP:

- Overall protection of human health and the environment;
- Long-term effectiveness and permanence;
- Reduction of toxicity, mobility and volume through treatment;
- Compliance with ARARs;
- Short-term effectiveness;
- Implementability;
- Cost;
- State acceptance; and
- Community acceptance.

The comparison and selection of a preferred alternative will be presented in the OU2 FS report.

3.5.3 Preliminary Identification of Potential ARARs

The RI/FS report will contain a site characterization summary that will evaluate remedial alternatives and the refinement and identification of federal and state applicable or relevant and appropriate requirements (ARARs). The RI/FS will describe chemical specific, location specific and action specific ARARs. The draft RI Report will complete a site characterization summary that will assist in evaluating the development and screening of remedial alternatives and refinement and identification of ARARs.

4.0 WORK PLAN RATIONALE

This section details the rationale used to conduct the activities to implement an RI/FS for OU2 with sufficient detail to characterize the Site and determine a range of remedial alternatives.

4.1 Data Quality Objective Needs

Data quality needs will be identified by evaluating the existing data and determining what additional data are necessary to:

- Characterize the Site with sufficient detail to complete the RI/FS;
- Develop a sufficient conceptual understanding of the Site;
- Define ARARs;
- Narrow the range of remedial alternatives that have been identified; and
- Select an appropriate Remedial Alternative that meets NCP criteria.

4.2 Work Plan Approach

The approach of this Work Plan is based on using the extensive existing data set to perform an initial characterization of the Site. The initial site characterization will assess the spatial distribution and quality of the existing data. The project team will use the results of the initial site characterization to determine the need for additional data collection.

The collection of additional data, if required, will follow the Triad Approach as described in Improving Sampling, Analysis and Data Management for Site Investigation and Cleanup (EPA, 2001). The Triad approach allows for flexibility in data collection.

The Risk Assessment approach to be used in this investigation relies on the work conducted for the OU1 Ecological and Human Health Risk assessments conducted by EPA. The OU1 Human Health and Ecological Risk Assessments will be reviewed to determine applicability to OU2. Specifically, the existing documents will be reviewed in light of what we currently know about Lower Silver Creek, to determine whether the two areas would be expected to have similar land uses, and/or ecological habitat. Based on this review, United Park will provide a report documenting how the existing assessments are applicable to OU2. In the case that additional Risk Assessments need to be performed, they will be conducted in accordance with applicable EPA guidance as described in Section 5.1.

Data collected as part of the RI/FS will determine the applicability of Treatability Studies (if required). Work conducted as part of the OU1 RI/FS determined that Treatability Studies were not required to meet the requirements of the Remedial Action. If data collected for OU2 determines that Treatability Studies are applicable for the Site they will be incorporated into the Feasibility Study portion of the RI/FS.

Potential Preliminary Remedial Alternatives range from No-Action (as required by the NCP) to Full removal of contaminants. The anticipated preferred Remedial Alternative will include isolating contaminants from surface and groundwater and protection of human health by reducing the potential for direct contact and selection of appropriate land uses. A detailed screening of Remedial Alternatives will be conducted in the RI/FS.

All work conducted by this RI/FS will be conducted in accordance with applicable EPA guidance.

5.0 RI/FS TASKS

The tasks to be completed by the RI/FS include the following 14 RI/FS Work Plan Standard Tasks (EPA, 1988);

1. Project Planning;
2. Community Relations;
3. Field Investigation (This task will include an evaluation of existing data);
4. Sample Analysis/Validation;
5. Data Evaluation;
6. Risk Assessment (Based on the results of OU1 Risk Assessments);
7. Treatment Study/Pilot Testing (if required, not anticipated based on work conducted at OU1);
8. Remedial Investigation(RI) Reports;
9. Remedial Alternatives Development/Screening;
10. Detailed Analysis of Alternatives;

11. Feasibility Study (FS) Reports (This will include Tasks 8 and 9);
12. Post RI/FS Support;
13. Enforcement Support; and
14. Miscellaneous Support.

5.1 Deliverables

This Section documents the deliverables to be prepared as part of the RI/FS. Deliverables will be submitted to EPA for review and approval pursuant to Section X (EPA Approval of Plans and Other Submissions) of the AOC. United Park will submit the following deliverables:

Quarterly Progress Reports

United Park will submit Quarterly Progress Reports on the 15th day of the month following each quarter. At a minimum, with respect to the quarter, these progress reports shall: (1) describe the actions which have been taken to comply with the Settlement Agreement during that quarter; (2) include all results of sampling and tests and all other data received by United Park; (3) describe work planned for the next quarter; and (4) describe all problems encountered and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays.

Sampling and Analysis Plan

Within 30 days prior to plan start date of field work as set in writing to EPA, United Park will submit a Sampling and Analysis Plan (SAP) to EPA for review. The SAP shall consist of a Field Sampling Plan ("FSP") and a Quality Assurance Project Plan ("QAPP"), prepared in accordance with "EPA Guidance for Quality Assurance Project Plans (QA/G-5)" (EPA/600/R-02/009, December 2002 or subsequently issued guidance), and "EPA Requirements for Quality Assurance Project Plans (QA/R-5)" (EPA 240/B-01/003, March 2001 or subsequently issued guidance).

Site Health and Safety Plan

Within 30 days prior to planned start date of field work as set in writing by EPA, United Park will submit for EPA review and comment a Site Health and Safety Plan (HASP) that ensures the protection of on-site workers and the public during performance of on-Site work under this Settlement Agreement. This plan shall be prepared in accordance with EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992 or subsequently issued guidance). In addition, the plan shall comply with all currently applicable Occupational Safety and Health Administration (OSHA) regulations found at 29 C.F.R. Part 1910. If EPA determines

that it is appropriate, the plan shall also include contingency planning. United Park will incorporate all changes to the plan recommended by EPA and shall implement the plan during the RI/FS.

Community Relations Plan

EPA will prepare a community relations plan, in accordance with EPA guidance and the NCP. As requested by EPA, Respondent shall provide information supporting EPA's community relations plan and shall participate in the preparation of such information for dissemination to the public and in public meetings which may be held or sponsored by EPA to explain activities at or concerning the Site.

Baseline Human Health Risk Assessment and Ecological Risk Assessment

United Park will provide a review of the existing Human Health and Ecological Risk Assessments for the Richardson Flat OU1, to determine whether conclusions from those assessments can reasonably be applied to OU2. Based on this review, the existing data summary and any additional data collected (if required), United Park will provide a technical report presenting how the existing assessments could be applicable to OU2. In the case that additional Risk Assessments need to be performed, they will be conducted in accordance with applicable EPA guidance, including but not limited to: "Interim Final Risk Assessment Guidance for Superfund, Volume I-Human Health Evaluation Manual (Part A)," (RAGS, EPA-540-1-89-002, OSWER Directive 9285.7-01A, December 1989); "Interim Final Risk Assessment Guidance for Superfund, Volume I-Human Health Evaluation Manual (Part D, Standardized Planning, Reporting, and Review of Superfund Risk Assessments)," (RAGS, EPA540-R-97-033, OSWER Directive 9285.7-01D, January 1998); "Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments" (ERAGS, EPA-540-R-97-006, OSWER Directive 9285.7-25, June 1997) or subsequently issued guidance

Draft Remedial Investigation Report

Within 60 days after EPA's approval of the OU1 Risk Assessments review and/or additional Risk Assessment reports, United Park will submit to EPA for review and approval, a Draft Remedial Investigation Report consistent with the RI/FS Work Plan and SAP. The Draft RI Report shall also contain the Risk Assessments.

Treatability Studies

Treatability Studies were not required in OU1. Treatability studies are currently being conducted by EPA ORD and if successful may be used to assist in the detailed analysis of alternatives.

Draft Feasibility Study Report

Within 60 days after EPA approval of the OU1 Risk Assessment Applicability Review, United Park will prepare Draft Feasibility Study (FS) Report which reflects the findings in the Risk Assessments. The FS Report will include detailed development and analysis of alternatives. The FS will be prepared in accordance with Table 6-5 of the RI/FS Guidance for report content and format. The report as amended, and the administrative record, shall provide the basis for the proposed plan under CERCLA Sections 113(k) and 117(a) by EPA, and shall document the development and analysis of remedial alternatives.

6.0 COSTS AND KEY ASSUMPTIONS

Remedial costs have not been determined at the time of Work Plan preparation. The RI/FS work will be conducted by the same project team that is currently conducting work at OU1. The project team's familiarity with the Site will enable the project team to conduct work in the same cost and time effective manner as OU1.

The use of existing data will also enable the project team to conduct the RI/FS in a cost-effective manner. The initial Site Characterization will identify the scope and quality of existing data, allowing the project team to streamline tasks without the duplication of previously conducted work.

7.0 SCHEDULE

The RI/FS will be conducted in accordance with schedules provided in the AOC and the Deliverables presented in Section 5.1.

Investigative and design tasks associated with the RI/FS can be completed prior to remedial and removal actions in impacted areas located upstream of OU2 (Section 2.1).

8.0 PROJECT MANAGEMENT

Kerry Gee will be the Project Coordinator for United Park and will manage the RI/FS. Environmental consultants at Resource Management Consultants, Inc. (RMC), will assist Mr. Gee where needed. The EPA Project Manager will be Kathryn Hernandez. The State of Utah Department of Environmental Response and Remediation (DERR) Project Manager will be Mo Slam. Analytical analysis will be conducted by American West Analytical Laboratories (AWAL). Site management is presented on Figure 8-1. Appendix A contains the contact information for the RI/FS. All personnel and contractors working with contaminated materials will have appropriate health and safety training including OSHA certification as required by 29 CFR 1910.120.

9.0 REFERENCES

Michael Baker Jr., Inc./ Psomas (Baker et al), 2001, Silver Creek Total Maximum Daily Load For Dissolved Zinc And Cadmium, Prepared For: Utah Division of Water Quality (UDWQ)

Park City Municipal Corporation (PCMC), 2009, Soils Ordinance Area Environmental Management System, 2008 Annual Report

Resource Management Consultants, Inc (RMC), Analytical Results for Surface Water Monitoring Activities Conducted May 2000, Addendum to the Sampling and Analysis Plan for Upper Silver Creek Watershed (RMC. 2000a);

Resource Management Consultants, Inc (RMC), Analytical Results for Surface Water Monitoring Activities Conducted September and November 2000, Addendum to the Sampling and Analysis Plan for Upper Silver Creek Watershed (RMC. 2000b);

Note: The following 2 documents in combination are referred to as the "OU1 RIFS":

Resource Management Consultants, Inc (RMC), 2004a, Focused Remedial Investigation (RI) Report for Richardson Flat, Site ID Number: UT980952840.

Resource Management Consultants, Inc (RMC), 2004b, Focused Feasibility Study Report (FS) for Richardson Flat, Site ID Number: UT980952840

Resource Management Consultants, Inc (RMC), 2008 Remedial Action/Remedial Design Work Plan, Richardson Flat, Site ID Number: UT980952840.

Syracuse Research Corporation (SRC), 2002, Screening Ecological Risk Assessment for Richardson Flat Tailings, Prepared for: US Environmental Protection Agency, Region 8.

Syracuse Research Corporation (SRC), 2003, Baseline Human Health Risk Assessment for Recreational Visitors at Richardson Flat Tailings, Prepared for: US Environmental Protection Agency, Region 8.

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www.summitcounty.org/history/snyderville/atkinson_school.html

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Tetra Tech, Inc. 2008c, Lower Silver Creek Wetland Delineation Park City, Utah, Prepared for: US Environmental Protection Agency, Region 8

Tetra Tech, Inc. 2008d, Draft Lower Silver Creek, Utah Reactive Transport Modeling under High Flow Conditions for Cadmium and Zinc, Prepared for: US Environmental Protection Agency, Region 8

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United States Environmental Protection Agency (EPA), 1988, Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA, OSWER Directive # 9355.3-01.

United States Environmental Protection Agency (EPA), 1990, Guidance for Data Useability in Risk Assessment, OSWER Directive #9285.7-05.

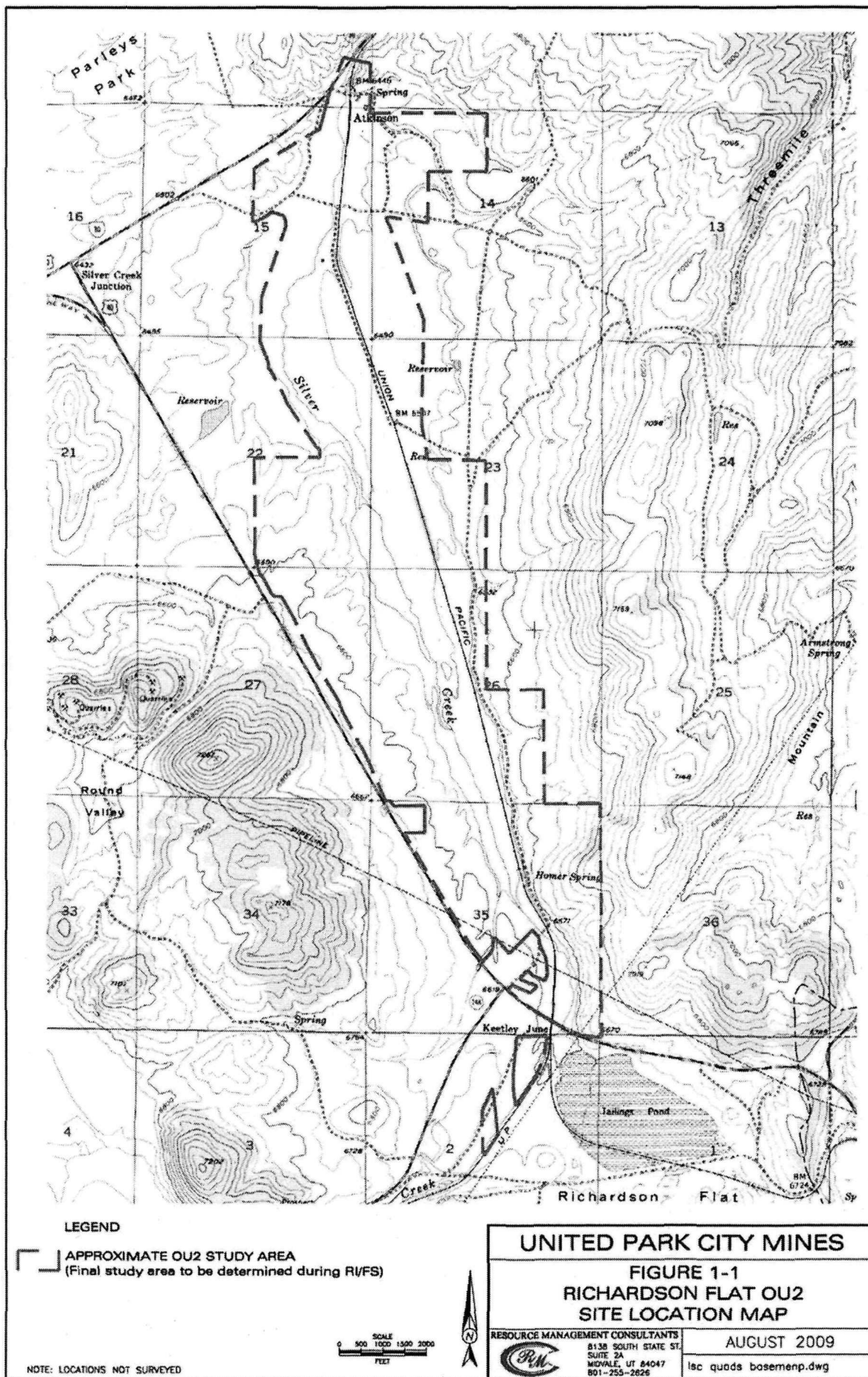
United States Environmental Protection Agency (EPA), 2005, Record of Decision, Richardson Flat Tailings Site.

United States Environmental Protection Agency (USEPA), 2001, Improving Sampling, Analysis and Data Management for Site Investigation and Cleanup, EPA-542-F-01-030a.

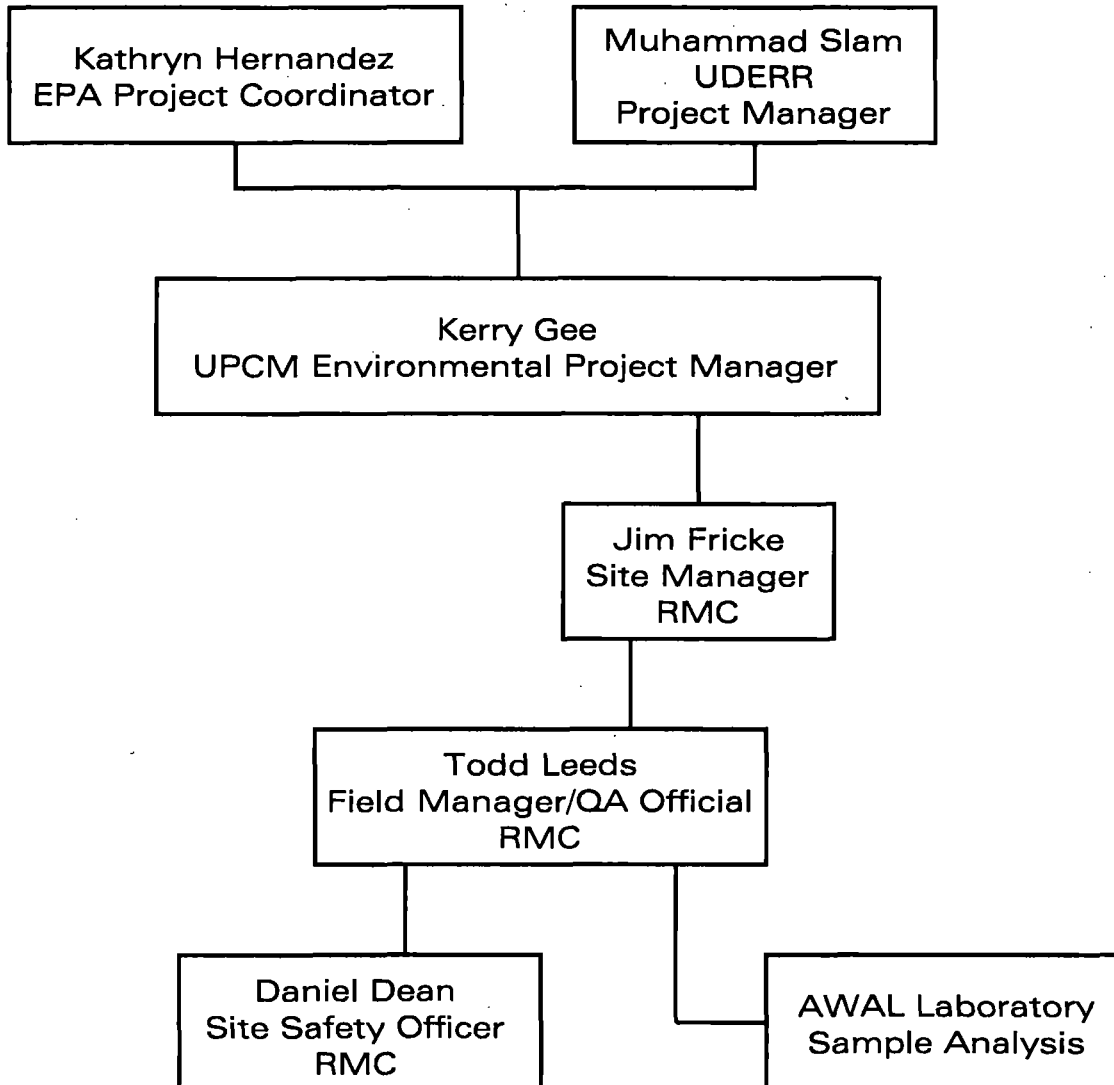
United States Geological Survey (USGS), 2001, Trace-Metal Concentrations in Sediment and Water and Health of Aquatic Macroinvertebrate Communities of Streams near Park City, Summit County, Utah, Water-Resources Investigations Report 01-4213

United States Geological Survey (USGS), 2002, Quantification of Metal Loading to Silver Creek Through the Silver Maple Claims Area, Park City, Utah, May 2002, Scientific Investigations Report 2007-5248

Utah Department of Environmental Quality – Division of Environmental Response and Remediation (DERR), 2002, Innovative Assessment Analytical Results Report, Lower Silver Creek, Summit County, Utah,” October.



**FIGURE 8-1 - Richardson Flat OU2 RI/FS
Organizational Chart**



Appendix A
Richardson Flat OU2
Contact Information

EPA:

Kathryn Hernandez
United States EPA
Region 8 Ref: 8EPR-EP
1595 Wynkoop St
Denver, CO 80202

State of Utah DERR:

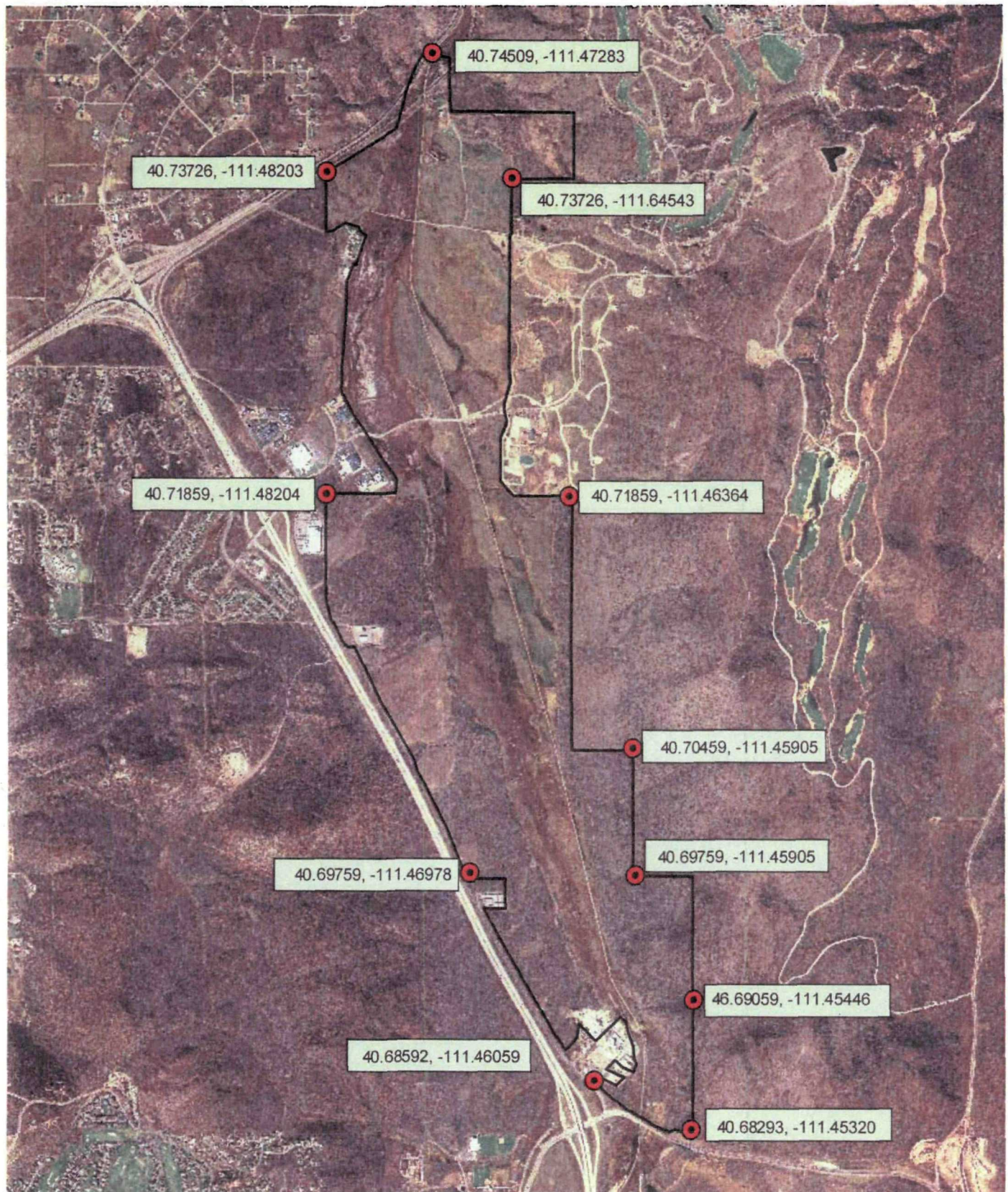
Muhammad Slam
Utah Division of Environmental Response
& Remediation
168 North 1950 West
1st Floor
Salt Lake City, UT 84116

United Park City Mines Company:

Kerry Gee
United Park City Mines
P.O. Box 1450
Park City, UT 84060

Resource Management Consultants, Inc (RMC):

Jim Fricke
RMC
8138 South State Street
Midvale, UT 84047



0.5 0 0.5 1 1.5 Miles

— Project Boundary
Coordinates are presented as
Latitude, Longitude in decimal degrees

Lower Silver Creek Project Boundary
Park City, UT

